

Effectiveness of Social Skills Training Program on Social Functioning and Severity of Symptoms Among Patients with Schizophrenia

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Abstract: This study aimed at evaluating the effectiveness of social skills training program on social functioning and severity of symptoms among newly admitted schizophrenic Patients. Quasi-experimental design (pre-posttest-groups) was utilized in this study. The present study was conducted at Al-Abbassia hospital for mental health. Purposive random sample consisted of 40 schizophrenic patients which were selected from six inpatient wards of newly admitted patients. Three tools were used to collect the data for the current study, Personal and medical data sheet, social functioning questionnaire and positive & negative symptoms scale (PANSS). A constructed social skills training Program was designed to help patients to develop and promote necessary skills for effective communication and interaction with others that needed for improved his/her functioning and independent living. This program was implemented over 15 sessions, three sessions per week and each session lasted about 60-90 minutes. Pre, and post assessment were carried out for the same group (self-control group). The current study results revealed that, overall significant effects of social skills training program regarding improving patients' social functioning and decreasing severity of symptoms. There was statistically significant difference between pre, and post assessment regarding dependent variables. A statistically significant positive correlation were detected between dependent variables and patients' related variables such as age, compliance with medication, with whom the patient stays, and numbers of previous hospital admissions. So, the study concluded that, the social skills training program was effective with newly admitted schizophrenics' patients concerning enhancing patients, social functioning and reducing severity of symptoms. The study recommended that, social skill training program should be integrated as an intervention in conjunction with pharmacological therapy without contraindications and it can maximize the effect.

Keywords: Schizophrenia, Symptoms, Social Skills, Social Functioning

1. Introduction

1.1. Back Ground of the Study

Schizophrenia is a severe mental disorder characterized by profound deficits in thinking, perception, affect, and social behavior. It influences around seven for every thousand-of age group of 15-35. In spite of the fact that its occurrence is low (3 for each 10,000), the pervasiveness is high because of the chronicity of the disease [1]. Incidence and commonness rates of schizophrenia are generally equivalent around the

world. In Egypt, schizophrenia is the most well-known psychiatric disorder, and speaks to the significant majority of inpatients in Egyptian mental hospitals [2], [3].

The disorder severely impairs family relations and working limit of the individual influenced, and in addition his psychosocial functioning including self-care skills and all other skills needed for an independent and competent lifestyle, quality of social relationships, family life, and occupational performance [4], [5].

Cognitive deficits in schizophrenia have been shown to interfere with various aspects of daily functioning, including

employment, independent living, quality of life and may show as a failure to precisely perceive meaningful gestures or to recover suitable response. Thus, schizophrenic patients experience difficulty gaining social and relational abilities [6], [7].

Most patients with schizophrenic have marked social skills deficits. These deficits make it difficult for them to establish and maintain social relationships, to fulfill social roles (e.g. work, spouse) or to have needs met. The unavoidable effect of schizophrenia across perceptual, cognitive, emotional and behavioral domains, additionally the heterogeneity within those domains requires a multi modal and comprehensive approach to treatment and rehabilitation which involves the individual and his or her environment [8]. Social skills training, has demonstrated effectiveness in yielding skill acquisition durability, and generalization and has been recognized as a psychosocial treatment of choice for schizophrenia. Psychosocial treatment aims at re-socialization and reintegration of schizophrenic patients in their environment and community for independent living and symptom reduction or remission is one of the most widely considered measures. [9], [10].

As services shift from the medical focus on removal of disease symptoms to the rehabilitation focus on the strengths of the individual to function in the community, the nurse brings an understanding of the essential parts of the treatment process (medications, health care and education) to the rehabilitation process. Thus nurses can facilitate the shift from psychiatrically disabled to psychiatrically able [11]. Mental health nursing practices span the full continuum of care providing comprehensive mental health services necessary for the promotion of mental health and the prevention, treatment, management, and rehabilitation of mental disorders of individuals,

Families and communities across the life span [12]. Studies showed improvement in social functioning of patients with schizophrenia treated with social skill training program and observed greater reduction of social impairment and functional disability with social skill training program when compared with other treatment approaches [13-16]. In this respect, a study done by others [17] revealed that, psychosocial interventions had an impact on social functioning improvements in patients involved in psychosocial program had higher scores in objective quality of life indicators. Moreover, preparing the patients for the transition to community is an innovative and multi-faceted nursing intervention emphasizes patient's self-determination, and continuity of care.

Although pharmacological treatment of schizophrenia is fundamentally important, when it is not adequately supported with social skill training programs it success tends to be limited. The most appropriate approach to the treatment of schizophrenia is the integration of pharmacological treatment with various specific psychosocial interventions [18]. In addition, the tertiary prevention aims at minimizing the impact of mental illness on patients' lives and preventing the relapse, the mental health nurses can use the cognitive ere

mediation and social skills training as efficient nursing interventions and strategies of management to overcome these disabilities that schizophrenic patients have, aiming to improve and maximizing the patient' level of psycho social functioning. [19].

1.2. Significance of the Study

Schizophrenic Patients have particularly deficit in social and functional skills that are required for daily life activities and to satisfy their roles in the community. Hence psychosocial programs emphasize on providing skills that improve their social interaction, independent living, and other outcomes that have clear relevance to community functioning.

Patients with schizophrenia who have deficit in skills that are needed for daily life activities should be exposed to training to improve their social skills in order to improve social interaction, independent living, and other outcomes that have clear relevance to community functioning skills training program vary widely content but typically include a focus on interpersonal skills and share several key elements including behaviorally based instruction, role modeling, rehearsal, corrective feedback and positive feedback [20].

Large and growing body of research of previous studies supports the efficacy and effectiveness of social skills training for schizophrenic patients. Where patients can learn and retain a wide variety of social and independent living skills. Social skills training programs facilitate patients 'Acquiring daily life skills when provided them with opportunities, encouragement, and reinforcement for practicing the skills in relevant, safe, and therapeutic situations. Consequently When patients equipped with skills to deal with stressful life events and daily hassles, they become more proficient in solving problems and challenges that arise in their lives; hence stressors are less likely to trigger exacerbations, stabilize their illnesses, improve adherence to medication, and promote progress toward recovery.

Together with other health professionals, psychiatric nurses participate in psychosocial therapies, also may serve as planners and coordinators of complex treatment program. Teaching social skills training is an important nursing intervention, nurses assist patients to learn and practice social interaction skills, as well as using effective communication to interact with others. Nurses can assist patients to solve his/her problems, thereby encouraging them to become what they want to be, promoting their social interaction and fostering a respect for their own rights and the rights of others. So, the researchers are interested in social skills training for hospitalized patients with schizophrenia and testing the effect of the training program on the social functioning and symptom intensity among those patients. It is hoped that findings of this study might help improving nursing care of patients with schizophrenia and establish evidence based data that can promote nursing practice and research [21]. So this study aimed at evaluating the effectiveness of social skills training program on social

functioning and severity of symptoms among patients with schizophrenia.

1.3. Aim of the Study

This study aimed at evaluating the effectiveness of social skill training program on social functioning and severity of symptoms among newly admitted schizophrenic patients.

1.4. Operational Definitions

Social skills training program: is a training consists of learning activities utilizing behavioral techniques that enable persons with schizophrenia to acquire interpersonal and social skills that enable them for interacting with others, improving their functioning in their communities and living Independently.

Newly admitted schizophrenic patients: patient who admitted to inpatient ward for managing acute signs and symptoms of schizophrenia, under typical antipsychotic medication/ and electroconvulsive therapy (without exacerbation signs and symptoms) at least one week after admission.

1.5. Research Hypothesis

Schizophrenic patients who are subjected to social skills training program will get higher mean scores of social functioning and lower mean scores of schizophrenic symptoms than before program implementation.

2. Methodology

2.1. Research Design

Quasi experimental design (one group pre and posttest design) was used to achieve the aim of the study.

2.2. Subjects

A Purposive sample of 40 schizophrenic patients (males and females) was recruited for conducting this study as confirmed by senior psychiatrist at the hospital. Participants were recruited from six wards for newly admitted patients at Al-Abassia hospital for mental health in Cairo, Egypt.

Al-Abassia hospital for mental health has 12 wards for newly admitted patients (six wards for males and other six wards for females). The researchers selected the sample from six wards of newly admitted patients (three wards for females and three wards for males). Eligible patients from selected wards at the hospital who meet the criteria were 48 males patients and 45 females patients. (9) patients involved in pilot (8) patients refused to participate, (5) patients had difficulty to interact in coherent way within group, and others patients (71) were listed alphabetically, then researchers blindly selected the first member from the list, then third name after that are involved in the program till reached 40 patient (20 males patients) and 20 females patients whose involved on pretest assessment.

Actual patients who completed post-test were 40 patients.

Informed consent for all participants was taken prior the beginning of the program. Patients maintained on their regular psychotropic medications, in combination with the social skill straining program. All participants (40) were assessed at baseline (T1), then at the end of the program (T2).

Inclusion Criteria:-

-Both genders

-Newly admitted patients

-Free from other organic disorders

Able to read and write-

-Having a diagnosis of schizophrenia or schizoaffective disorders based on ICD-10, for at least one year.

-Being physically and psychiatrically stable enough to interact within group

-Free from mental retardation and other neurological disorders

-Adherence to typical antipsychotic medication within hospital

2.3. Setting

This study was conducted at AL-Abassia hospital for Mental Health inpatient males and females wards.

2.4. Tools of Data Collection

Data was collected through utilizing the following tools:

1-Personal and medical data sheet: It was developed by the researchers to elicit information about patients age, marital status, educational level, numbers of hospital admissions, duration of hospitalization, medication compliance, and patient occupation.

2 -Pre/post assessment tools include

a-The Social Functioning Questionnaire:

The Social Functioning Questionnaire: was developed by. [22] Paul, Cand Isobel, M (2003). Its designed to assess of patient's social functioning. It is divided into 5 categories, each containing 8 items to be completed (40 items): Self-care Skills, Domestic Skills, Community Skills, Social Skills and Responsibility. All items were answered using a 4-point Likert scale form at ranging from 1 (incompetent) to 4 (competent), with a total scorer ranging from 41 to 164. The scores are summated for each category. Mean scores of each categorize divided into highly functioning at 3.8 and above, moderately from 3.2 to less than 3.8, low from 2.4 to less than 3.2, poorly functioning 1.4.

The reliability of the tool was checked by the researchers by cronbach alpha. The questionnaire had been used in several studies, and proved to be valid. The questionnaire was translated into Arabic language, reviewed for the accuracy of translation and checked by three professors in psychiatric nursing, at Cairo University.

b-Negative and positive Syndrome Scale. It developed by. [23] Stanley Kay, Lewis Opler, and Abraham Fiszbein (1987). It used for measuring symptom severity of patients with schizophrenia. The patient response is rated from 1 to 7 on 30 different symptoms. Positive scale (7 Items minimum

score=7, maximum score=49) Negative scale (7 Items, (minimum score=7, maximum score=49). Psychopathology scale 16 Items, (minimum score=16, maximum score=112).

Reliability of the tool

Reliability was applied by the researcher for testing the internal consistency of the tool (Test-re-test reliability). The tool revealed very strong reliability for social functioning 0.948, while for Negative and positive Syndrome Scale was 0.79.

2.5. Program Description

Program Objective

The program was designed to teach patients necessary skills for effective communication and interaction with others that needed for improved his/her functioning and independent living, which consecutively alleviate the severity of psychiatric symptoms.

Social skills Training facilitates improving communication skills through behavioral role plays, including active listening, expressing positive and negative feelings and making positive requests. Important role plays included assertive interactions with friends and family, and making new friends. Also imitating problem solving skills focus was on developing specific, feasible plans to solve real-world problems, including scheduling pleasant activities, improving living situations, finances, using public transportation, finding a job.

Specific objectives of the program.

1-Engage in appropriate conversation, for example, initiation, maintenance, termination, and attending and responding to others.

2-Recognize different styles of communication, passive, assertive, and aggressive and its impact on communication with others

3-Empower patients with skills of solving problems as financial, transportation, plan for activities.... etc

The study program was designed to be 15 sessions implemented on four phases, where first two sessions were for assessment, program sessions were 12 sessions and final session for evaluation.

1-Preparatory phase

A-Preparation of the content

The content of the program based on others related literature The planning phase includes the program strategy (time table, teaching methods, and participants assignments based on each skill were given).

The content of the program includes:

1. General overview of schizophrenia, signs and symptoms
2. Impact of schizophrenia on patients' skills such as (self-care, social and, domestic)
3. Practice effective communication skills with
4. Others (verbal and nonverbal cues, initiating and maintaining communication, and active listening for others)
5. Practicing self-care activities. grooming care, personal hygiene through application of positive management

6. Utilization of different conversational skills (attending and responding skills)

7. Practicing three types of communication on social interaction with others (passive, aggressive, and assertive type)

8. Teaching problem solving skills

b-Preparing patients: related to assessment phase

Preparing patients to be involved in the study was established by the researchers through introductory phase. Rapport with patients, introduce each one to other patients and researchers facilitate feeling of warmth and security

C-Assessment and data collection: (pretest)

All participants completed all pre-test tools before the beginning of the program. This assessment was completed through patients' semi-structured interview, to collect data related to social functioning. While observation and revision of patients' records were checked by the psychiatrist for patients' assessment for signs and symptoms.

2-Introductory phase: (2 sessions):

Through an introductory session the researchers introduce themselves to subjects, explain the objective of the program and orient them about the place of sessions, time, its titles in addition to taking oral contract for compliance on attendance of sessions and build good relation with them. Moreover base line assessment before the program implementation through the relevant selected tools (Personal and medical data sheet, Social Functioning Questionnaire and negative and positive Syndrome Scale).

Participants were divided into subgroups, each group consisted of 7 participants to facilitate interaction and practice.

3-Implementation phase: (12 sessions):

It was constructed based on patient needs as indicate through base line assessment with special emphasis on the basic principles and the requirements of the work and which should include the following content.

This training program has a general objective and divided into session each session has a set of specific objectives. This was achieved through several teaching methods such as: brain storming, lecture, discussion, providing the example. Data show, role play. and pictures were used as media. At the end of each session summary, feedback, further clarifications were done for vague items.

In this stage, researchers started by widely accepted to more difficult contents. The meetings were three times per week at the same time and in the same room (at the ward). Discussion about planned activities and demonstration of new skills were done. New skills as attending to verbal and non-verbal cues, expression of opinions, this learnt through guidance, demonstration, and practice.

After participants had practiced and applied new skill, the researchers reinforced to participate in planned activities as role play, demonstration and practice of the skills by explaining the benefits of practicing as to initiate and maintain relationship with others, effective interaction with others, and relieving tension. Researchers used open-ended questions, warmth and concern with participants "problems

as the patients refused to interact with group and practice taught skill. Teaching another skills of work place stressors through identification of work place stressors, manage interpersonal problems, coping with supervisors, deal with work related duties, coping and interact with formal socialization. Each session is packaged with power point presentation, pamphlet involves the main points of topic, and what intended to achieve.

Group interaction was observed and recorded in each session as patient who accepts to interact with only one patient and refused to interact with all other patients. The final 10 minutes at each session was for summary, and this summary focused on skill that learnt during the session. Evaluation for each session was done through, immediate feedback from participants and patients assignments, the researchers prepared the final two sessions for termination.

4-Evaluation phase (last session):

All patients were assessed through the same relevant selected tools upon termination of social skill training program. Participants were reassessed by using the same tools of pretest and comparison was done to determine the effectiveness of the program evaluation.

2.6. Pilot Study

A Pilot study was carried out on 9 of newly admitted schizophrenic patients, who were excluded from the actual study, to ensure the clarity and the applicability of the study measures. No modifications was done for the questionnaire.

2.7. Ethical Considerations

Primary permission was obtained from the ethical committee of scientific research at AL-Abassia hospital for mental health. In addition, an official permission was obtained from the director of AL-Abassia hospital for mental health and from the director of male/female wards to conduct the study.

Study participants were informed that they have the right to refrain from participating in the study at any time without experiencing any negative consequences. Informed consents were obtained from all eligible participants who agreed to participate in the study. Data confidentiality and patients "privacy were secured. Code numbers were created and kept by the researchers to keep patients' anonymity.

2.8. Field Work

A comprehensive reading of the available literature was done to assure the significance of the study and obtain an idea about current issue. An official permission from the ethical committee of scientific research at AL-Abassia hospital for mental health the program was structured after reviewing the related literature and researches then the programs and tools was revised by at least three panel of experts in the psychiatric field to assess the content validity of each the researchers was explain the nature and aim of the study its importance and its benefits to gain patients cooperation. The researchers used semi structured interviews,

lasted for about 30-45 minutes, the following steps was adopted to collect data by using questionnaire sheets

The purpose of the study was explained for subjects and oral consent was obtained, then written consent was obtained immediately before filling the tools. These tools were kept anonymously by using code number. The purpose of the study was explained for psychiatrists and nursing staff of all selected wards for chronic patients to gain support and corporations. Fixed time and room were determined for program sessions the researchers were starting the data collection from the beginning of February to June 2017 three days/week, from 9Am:2Pm, voluntary participation, confidentiality and anonymity were assured.

2.9. Statistical Analysis

Statistical Design Data were analyzed by using the Statistical Package for the Social Sciences statistical software (SPSS version 20). Descriptive statistics were computed to examine data distributions and to summarize data. Test and ANOVA-test were used to test the statistical significant differences between the pre and post assessment. According to the base line scores of the social functioning and overall symptoms scales, comparison was done between pre/post assessments for study group using paired-*t* test. Mean change was used to calculate the change after program sessions, Reported *p* values with level of significances at $p < .05$.

3. Results

This study was conducted on forty newly admitted schizophrenic patients to investigate the effectiveness of social skills training program on their social functioning and severity of symptoms. Data collection method was utilized and the results of this study were presented in the following sequences.

Table 1. Demographic and Clinical Characteristics of Studied Subjects ($n=40$).

Variables	No.	%
Age		
20<30	5	12.5
30<40	13	32.5
40<50	17	42.5
50<60	5	12.5
Min.-Max.	25.0-55.0	
Mean±SD.	40.30±8.40	
Gender		
Male	20	50.0
Female	20	50.0
Total	40	100.0
Marital status		
Single	15	37.5
Married	14	35.0
Others	11	27.5
Total	40	100.0
Educational level		
Illiterate	12	30.0
Moderate	11	27.5
Highly educated	17	42.5
Total	40	100.0

Variables	No.	%
With whom the patient stays?		
Alone	5	12.5
With relatives of first degree	28	70
With relatives of second degree	7	17.5
Total	40	100.0
Patient Employment		
Yes	17	42.5
No	23	57.5
Total	40	100.0
Numbers of previous admission		
<3 times	17	42.5
3-6 times	23	57.5
Total	40	100.0
Length of Hospital stay		
<3 months	26	65.0
3-6 months	14	35.0
Total	40	100.0
Compliance to medication		
Yes	3	7.5
No	24	60.0
Sometimes	13	32.5
Total	40	100.0
Physician follow up		
Yes	5	12.5
No	17	42.5
Sometimes	18	45.0
Total	40	100.0

ranged between 20 to <60 years, less than half of the sample (42.5%), their ages were ranged 40<50 and about one third of them (32.5%) their ages were ranged 30<40. Regarding their gender half of them 50% were males and other half were females. In relation to their marital status, than one third (37.5%) was single and other third (35%) was married. More than two thirds (70%) of the participants had secondary and higher educational level, in relation to with whom the patient living, it was found that more than two thirds of them stayed with their relatives of first degree (70%). More than half of the sample (57.5%) didn't work and had more than three previous hospital admissions, regarding medication compliance it was found that 60% of the studied subjects didn't adhered to medication and 42% of them didn't participate in Physician follow up.

Figure 1: Showed the effects of program on severity of patients symptoms and overall social functioning, where the mean scores of over all symptoms for post test group was significantly different from the mean score for pre test group (85.75 ± 11.41 , 77.80 ± 9.93) respectively at $P < 0.001$. Also overall social functioning, there was a statistically significant difference between the mean scores of the pretest (56.33 ± 13.0) than the post test (72.28 ± 12.63) at $P = 0.001$.

Table (1): demonstrated that, the age of the studied sample

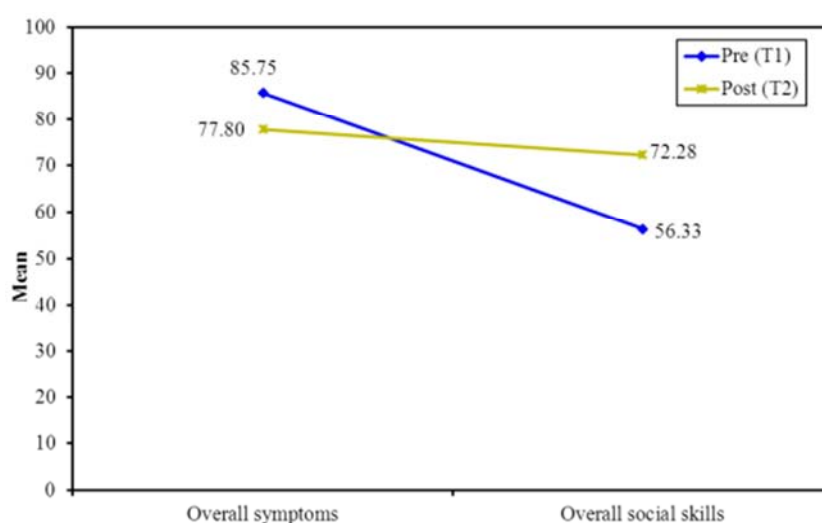


Figure 1. Comparison Between Mean Scores of Pre and Post Assessment Regarding Dependent Studied variables (n=40).

Table 2. Comparison of Mean Scores of Positive Symptoms of Positive and Negative Symptoms Scale at pre and post Program Intervention for the Studied Subjects (n=40).

Positive symptoms	Pre(T1) Mean±SD.	Post(T2) Mean±SD.	t	p
Delusions	4.25±1.01	3.58±1.03	4.076*	<0.001*
Conceptual disorganization	2.65±1.27	2.50±1.22	1.778	0.083
Hallucinatory behavior	2.78±1.66	1.98±1.05	3.361*	0.002*
Excitement	2.23±1.46	1.75±0.87	2.276*	0.028*
Grandiosity	2.13±1.34	2.08±1.25	0.628	0.534
Suspiciousness/persecution	3.30±1.65	3.20±1.68	1.275	0.210
Hostility	1.68±1.21	1.58±0.93	0.941	0.352
Over all positive symptoms	18.73±4.58	15.30±3.90	3.081*	0.004*

t, p: t and p values for Paired t-test for comparing between pre and post

*: Statistically significant at $p \leq 0.05$

Table (2) clarified a statistically significant differences between mean scores pre and post test group regarding total positive symptoms (18.73 ± 4.58 , 15.30 ± 3.90 at $p=0.004$) and on three domains: Delusions, Hallucinatory behavior and Excitement ($p<0.001$, 0.002 , 0.028) respectively.

Table 3. Comparison of Mean Scores of Negative Symptoms of Positive and Negative Symptoms Scale at pre and post Program Intervention for The Studied Subjects ($n=40$).

Negatives ymptoms	Pre(T1)	Post(T2)	t	p
	Mean \pm SD	Mean \pm SD		
Blunted affect	3.25 \pm 1.21	3.13 \pm 1.18	1.955	0.058
Emotional withdrawal	3.93 \pm 0.89	2.63 \pm 0.87	8.078*	<0.001*
Poor rapport	3.70 \pm 0.94	3.58 \pm 0.93	1.220	0.230
Passive/apathetic social withdrawal	3.83 \pm 1.13	3.73 \pm 1.09	1.275	0.210
Difficulty in abstract thinking	2.95 \pm 1.20	2.85 \pm 1.14	1.160	0.253
Lack of spontaneity and flow of conversation	2.55 \pm 1.48	1.80 \pm 0.97	4.298*	<0.001*
Stereotyped thinking	2.68 \pm 1.16	2.55 \pm 1.08	1.044	0.303
Overall negative symptoms	22.88 \pm 5.07	20.25 \pm 3.78	6.248*	<0.001*

t, p: t and p values for Paired t-test for comparing between pre and post

*: Statistically significant at $p \leq 0.05$

Table (3) demonstrated a statistically significant differences between mean scores pre and post test group on total negative symptoms (22.88 ± 5.07 , 20.25 ± 3.78 at $p<0.001$) and on two domains: Emotional withdrawal, and Lack of spontaneity and flow of conversation at ($p<0.001$ for both).

Table 4. Comparison of Mean Scores of General Psychopathology of Positive and Negative Symptoms Scale at pre and post Program Intervention for the Studied Subjects ($n=40$).

General psychopathology	Pre(T1)	Post(T2)	t	p
	Mean \pm SD	Mean \pm SD		
Somatic concern	2.75 \pm 1.56	2.90 \pm 1.41	0.771	0.446
Anxiety	3.43 \pm 1.36	2.33 \pm 0.94	5.448*	<0.001*
Guilt feelings	2.20 \pm 1.54	2.18 \pm 1.47	0.274	0.785
Tension	3.10 \pm 1.39	3.15 \pm 1.29	0.305	0.762
Mannerisms and posturing	2.30 \pm 1.54	2.30 \pm 1.47	0.0	1.000
Depression	1.65 \pm 1.25	1.65 \pm 1.19	0.0	1.000
Motor retardation	2.13 \pm 1.34	2.38 \pm 1.35	1.657	0.105
Uncooperativeness	3.53 \pm 1.18	3.58 \pm 1.20	0.339	0.736
Unusual thought content	3.0 \pm 1.41	3.10 \pm 1.28	0.628	0.534
Disorientation	1.58 \pm 1.17	1.45 \pm 0.93	1.000	0.323
Poor attention	2.75 \pm 1.30	1.93 \pm 0.83	4.080*	<0.001*
Lack of judgment and insight	3.05 \pm 1.18	3.10 \pm 1.15	0.572	0.570
Disturbance of volition	3.65 \pm 1.17	2.38 \pm 1.0	5.703*	<0.001*
Poor impulse control	2.28 \pm 1.38	2.48 \pm 1.38	1.537	0.132
Preoccupation	3.10 \pm 1.35	2.50 \pm 1.18	2.399*	0.021*
Active social avoidance	3.68 \pm 0.92	2.88 \pm 1.14	4.066*	<0.001*
Overall general psychopathology	44.15 \pm 6.32	40.25 \pm 6.27	4.973*	<0.001*

t, p: t and p values for Paired t-test for comparing between pre and post

*: Statistically significant at $p \leq 0.05$

Table (4) showed that a statistically significant differences between mean scores pre and post test group on General psychopathology symptoms (44.15 ± 6.32 , 40.25 ± 6.27 at $p<0.001$) and on items related to: Anxiety, Poor attention, Disturbance of volition, Preoccupation and Active social avoidance at ($p<0.001$).

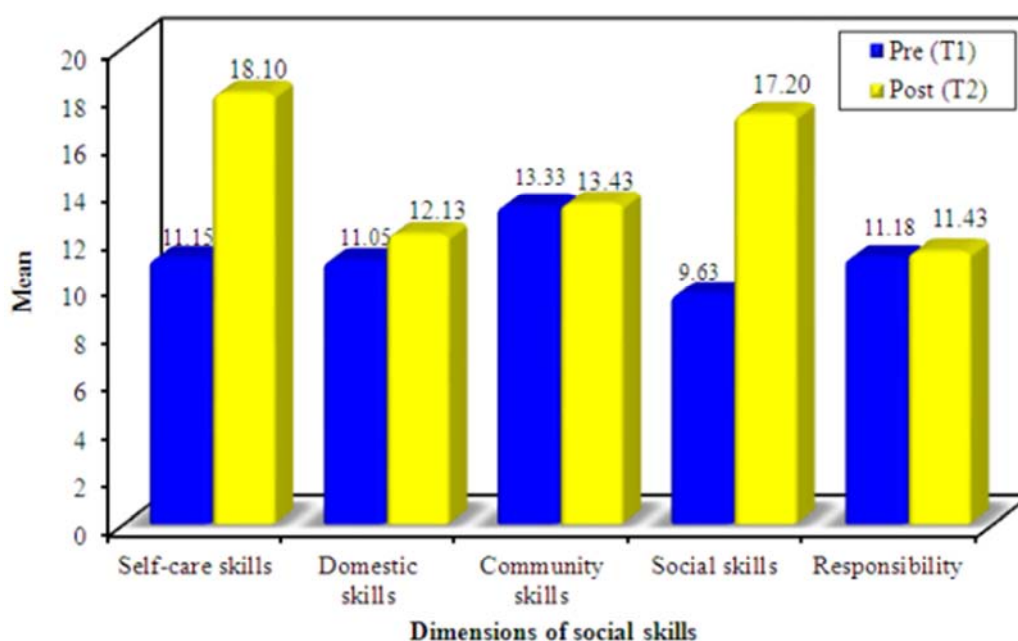


Figure 2. Comparison Between Mean Scores of Social Functioning Dimensions at pre and post Assessment for the Studied Subjects (n=40).

t and p values for Paired t-test for comparing between pre and post

*: Statistically significant at $p \leq 0.05$

Figure (2) revealed that, a statistically significantly different between mean scores of social skills dimensions at pre and post assessment in relation to Self-care skills and social skills, where pre and posttest mean scores were (11.15 ± 2.78 , 18.10 ± 4.19) and (9.63 ± 1.96 , 17.20 ± 3.48) respectively at $P=0.001$. While the other dimensions not proved to be significant.

Table 5. Relationship Between Mean Scores of Social Functioning, Overall Symptoms and Patients' Socio-demographic and Clinical Characteristics for The Studied Subjects (n=40).

	Overall social functioning			Overall symptoms severity		
	Mean \pm SD.	Test of sig.	p	Mean \pm SD.	Test of sig.	p
Age						
20<30	74.20 \pm 18.78	F=5.960*	0.002*	70.60 \pm 11.15	F=5.482*	0.003*
30<40	53.46 \pm 8.73			89.38 \pm 8.12		
40<50	51.47 \pm 8.64			88.82 \pm 9.33		
50<60	62.40 \pm 16.50			81.0 \pm 14.20		
Gender						
Male	50.75 \pm 7.55	t=2.890*	0.006*	89.25 \pm 7.30	t=2.014	0.051
Female	61.90 \pm 15.52			82.25 \pm 13.72		
Marital status						
Single	51.60 \pm 7.80	F=2.368	0.087	89.40 \pm 8.18	F=1.013	0.3988
Married	59.14 \pm 10.93			83.93 \pm 8.97		
others	53.67 \pm 13.48			81.89 \pm 18.16		
Educational level						
Illiterate	51.17 \pm 8.45	F=5.645*	0.007*	90.50 \pm 9.72	F=3.053	0.059
Secondary	50.55 \pm 8.89			88.0 \pm 8.49		
Higher level	63.71 \pm 15.23			80.94 \pm 12.75		
With whom the patient stays						
Alone	46.80 \pm 7.09	F=3.774*	0.019*	95.60 \pm 13.11	F=3.060*	0.040*
With relatives of first degree	63.12 \pm 17.07			80.88 \pm 13.50		
With relative of second degree	54.91 \pm 4.57			85.91 \pm 3.88		
Patient work						
Yes	61.29 \pm 16.51	t=2.121*	0.021*	82.00 \pm 11.43	t=1.841	0.074
No	52.65 \pm 9.07			88.52 \pm 10.81		
Numbers of previous hospital admission						
Less than 3 times	63.53 \pm 16.34	t=2.826	0.010*	79.82 \pm 12.30	t=3.096*	0.004*
From 3 to 6 admission	51.50 \pm 6.94			90.50 \pm 8.60		
Length of Hospital admission						
Less than 3 months	58.65 \pm 13.36	t=1.051	0.300	84.15 \pm 10.17	t=0.451	0.655
3 to 6 months	53.83 \pm 12.61			85.83 \pm 11.72		
Compliance to medication						

	Overall social functioning			Overall symptoms severity		
	Mean±SD.	Test of sig.	p	Mean±SD.	Test of sig.	p
Yes	76.67±12.90	F=4.725*	0.015*	66.0±11.53	F=6.190*	0.005*
No	55.63±13.40			87.0±10.33		
Sometimes	52.92±9.28			88.0±9.50		
Physician follow up		F=0.031	0.969		F=1.059	0.357
Yes	57.0±9.97			86.40±9.04		
No	55.71±11.60			88.53±11.64		
Sometimes	56.72±15.97			82.94±11.66		

t, p: t and p values fort-test F, p: F and p values for ANOVA test

*: Statistically significant at $p \leq 0.05$

Table (5): showed that, There were statistically significant positive correlations between some patients demographic characteristics such as age, gender, educational levels, and their social functioning. Also With whom the patient stays, and patient occupation were positively correlated with their social skills. Regarding severity of symptoms, some socio demographic characteristics as patients' age and with whom the patient stays were positively correlated with overall symptoms. While some clinical variables as numbers of previous hospital admissions and Compliance to medication were correlated with their social functioning and overall symptoms

4. Discussion

The current study was conducted to evaluate the effectiveness of social skills training program on social functioning and severity of symptoms among newly admitted schizophrenic patients.

The current study findings revealed that, the majority of the studies subjects age were ranged between 40<50 years old. this may be due to pre determine inclusion criteria of the studied sample regarding the age (20-60) years old this finding is consistent with others [24], [25] found that near to half of their samples, their ages were ranging from 30-40 years.

Regarding marital status the majority of the studied subjects were unmarried as they were single or divorced/separated. This result could be attributed to the negative effect of schizophrenia on the interpersonal relationships of the patients. In the same line the result was consistent with the results of previous study [21] showed that, the majority of studied sample were single and referred their results to poor social adjustment as a well-known major symptoms of schizophrenia, on the contrary the results of the current study was inconsistent with the findings of others [26] indicated that, more than half of the studied sample was married. In the same direction, authors [27] high lighted the role of marital status (widowed, divorced/separated) as risk factor for recurrent mental illness, therefore marital status might not have a significant effect on patient social skills.

Concerning level of education and occupation majority of the studied subjects were higher education and majority of them were not working as they were left their works or didn't work at all because of illness manifestations or hospitalization. A recent study done by [28] showed that

lacking in vocational status are very common in people with schizophrenia but that the determinants are multi-dimensional. Furthermore, premorbid educational attainment appears to be related to parental social status. On the other side studies done by [29], [30] clarified that, the majority of their studied samples were illiterate, or had primary school education, on the other hand results related to occupation were consistent with the findings of the same authors who mentioned that the majority of their study samples were not working.

It's noticed that, more than half of the studied subjects admitted to the hospital from 3-6 times and their length of hospitalizations were less than 3 months. On the same line previous studies by [31], [32] pointed out to the relationship between socio-economic status and psychiatric readmissions to hospital for mental illness the only associated factor with early readmission was poor compliance to medications,

A study done by [33], [34] showed that, readmission is responsible for up to half of all hospital admissions, particularly when occurs within relatively short period of time after previous discharge, is often due to a failure of the earlier hospital admission. On contrary, only a small number of reports have addressed the phenomenon of early readmission despite the fact that it is as high as 30% of all discharged patients.

It also noticed that, the current findings mentioned majority of the study subjects were not adhere to medication and didn't follow up psychiatrist this finding was similar to a study by [33], [35] who found that, non-adherence to medication can ranged from patients who refuse to take prescribed medications due to lack of acceptance of the need for medication, to patients who perceive the need for medications and are committed to treatment but are non-adherent to medication due to forgetfulness or financial constraints, also Lack of family support for adherence, or having no family, further contributes to non-adherence to medications

Furthermore, a study done by [36], [37] emphasized that, non-adherence to medications during the first week after discharge from an inpatient hospitalization was associated with a high risk for re-hospitalization within one month of discharge. Length of hospital stay is also extended due to non-adherence. An average hospital costs in non-adherent inpatients were three times higher than costs for adherent inpatients, although pharmacy costs were higher among adherent compared to non-adherent in patients. Thus, it was

expected that patients with adequate knowledge about their disease and treatment can experience significant improvements in terms of medications adherence, to the extent that they gradually accept and understand their situation, resources and potentials. Although they suggested that, health education can also influence and affect patients and families' involvement in healthcare.

Concerning physician follow up 0.5% while 45.5% of them sometimes participate in Physician follow up.

This was contradicted with [38] who confirmed that, outpatient visits within 60 days after discharge could decrease the risk of re-hospitalization within one year. Thus, the number of outpatient visits after discharge turned out to be a very important indicator of re hospitalization in maintenance treatment of schizophrenia. Some previous studies have emphasized the importance of outpatient visits after discharge. Previous result [39], [40], [41] showed that, patients with at least one outpatient visit within 60 days after discharge have decreased the risk of re hospitalization. Patients without outpatient visit after discharge have twice the risk of re hospitalization within a year, as well as psychiatric patients without patient visits showed a significantly lower re-hospitalization rate within 6 months than those without outpatient visits.

Thus Lack of follow-up might lead to increase psychotic symptoms and raised risk of relapse and re-hospitalization in order to minimize recurrence and re-hospitalization, the establishment of post-discharge outpatient appointments seems to be critical.

According to overall patients positive symptoms there was a highly statistically significant relations between the mean scores of pre and post test as regard $P=0.004^*$ regarding the domains of delusions, Hallucinatory behavior and Excitement which indicates positive significant effect of the implementation program in improving these domains these results were similar to results of a study done by [21] the most common positive symptoms were hallucination and unusual thought content which ranged from moderate to severe intensity.

Furthermore, a study done by [42] assessed the effect of activity therapy on symptoms of schizophrenic patients, reported that, suspiciousness, grandiosity, hostility and hallucinations were the most common positive symptoms observed among studied sample, meanwhile, emotional withdrawal, poor rapport and lack of spontaneity were the most observed negative symptoms. Furthermore, there were no statistically significant difference between others positive symptoms at pre and post program scores.

In relation to patients negative symptoms, there was a highly statistically significant relations between the mean scores of pre and post test as regard $P<0.001^*$ these findings were consistent with [28] agreed on that, social skill training can decrease the negative symptoms of chronic schizophrenic patients and this result is in agreement with findings of others [43], [44] emphasized that, negative symptoms of schizophrenia could be reduced through applying the appropriate plans and practices. Psycho social activity can

affect negative symptoms positively, although negative symptoms can be considered as resistant feature against change after treatment interventions such as Pharmacotherapy and psychotherapy.

The current treatment methods of schizophrenia are multidimensional approaches to reduce multiple disorders and affecting its different dimensions. It was found that, a statistically significant increase of social skills mean scores of studied sample post program implementation. This could be due to the positive effect of social skill training for improving socialization among studied sample. This result demonstrated that, persons with schizophrenia were capable of learning a wide range of social skills. Other possible reasons for improving in social skills, participants were instructed to behave assertively in role-playing situations. During the role playing and practice in the training, participants were encouraged to praise each other using positive verbal affirmations, which encouraged their relations and performances the fact that participation in the program has helped the less assertive schizophrenic patients to reach and practice assertive behaviors in communicative conditions with others in area land natural way and use the mine right manner.

In relation to social skills dimensions the current study findings demonstrated that, there were highly statistically significant relations between mean scores of pre and post test as regard at $P<0.001^*$ also in domains related to self-care skills and social skills at $P<0.001^*$.

The findings were supported by other results [45] as mentioned that, skill deficits were wide spread, although not ever-present inpatients with schizophrenia and tend to be relative stable overtime. In large number of patients, decrease in social competence persist despite antipsychotic treatment. Patients with schizophrenia had difficulty fulfilling social roles, such as worker, partner, spouse, and friend. They had difficulty and problems in recognizing their needs when social interaction is required.

Previously [46] found that, after implementation of group activity sessions schizophrenic patients had significantly greater improvement in mean scores of frequency of their interactions with other patients. Furthermore [26] studied the effect of structured nursing intervention on self-care skills of schizophrenic patients and others [29] studied the impact of therapeutic activity on social skills of schizophrenic patients both of them reported significant statistical difference pre and post program scores in their study samples in relation to personal hygiene.

In addition to previous result by [15], [18] reported significant improvement in hygiene and grooming, level of socialization, relationship with others and spontaneity of conversation among a sample of schizophrenic patients after receiving a program. Furthermore, significant reduction in both negative and positive symptoms among schizophrenic patients who receive several months of psycho social skills training plus pharmacotherapy.

In the same line, previous study by [47] added that, the nurse can develop social skill through education, role

modeling and practices because patients are most likely to perform tasks when they become a part of their daily routine. Modeling and practicing social skills with patients can encourage them to experience greater success in social interactions. specific skills such a self care, eye contact and alternative listening can improve the patients abilities and confidence in interaction and communication with others.

These findings were contradicted with [48] who disagreed on that, social skill training is difficult to evaluate. While some studies have focused on rehearsal of activities of daily living, other concentrate on communication and conversational skills, and although some view improvement in symptoms as the underlying goal, for others the benefit lies with cognitive ability.

The improvement of social skills is connected with decrease in the patient's life stress and also with decrease in psychotic symptoms and improvement in the quality of life. So intervention is a crucial component of the nursing process psychosocial interventions are nursing activities that enhance the patients social and psychological functioning and improve social skills, Interpersonal relationship and communication. Nurses often use psychosocial interventions to help meet patients needs and achieve out come in all practice settings.

Comparing between the mean changes of overall symptom of the studied subjects post program implementation, the present study shows that there was a highly statistically significant reduction of mean score of overall symptoms post program implementation. This means the program shows a positive effect on improvement of symptoms among schizophrenic patients. This result is consistent with others [49], [50] who pointed out that, social skill training help for improving the quality of patient's interpersonal communication, relationships and reducing their psychotic symptoms. This may be due to an attempted to improve knowledge and awareness of psychiatric illness, provide coping skills for improving medication adherence and effective communicating skills. In the same line, skills training relied heavily on feed back and praise during behavioral role-plays carried out by patients in groups, as well as in group practice.

Regarding overall symptoms intensity and social skill training it was found that compliance to medication were significantly correlated with overall social skills and overall symptoms severity. these results were consistent with results done by [51] emphasized that, the poor compliance group had significantly high subscale scores for alogia and avolition-apathy, indicating more marked negative symptoms. Also they found that patients who were poorly compliant to medications did seem to have had a shorter, more severe course of illness with greater severity of negative symptoms and the same number of hospital admissions in a shorter period of time compared with patients who were more compliant to their medications.

This can be explained by Patients with avolition and apathy may find it difficult to motivate themselves to get to

the depot clinic regularly. Perhaps patients with negative symptoms are reluctant to attend for their depot medication because they feel it does not help their residual symptoms. They may not appreciate the beneficial effects depot medication has on their positive symptoms and instead tend to focus on the limited effect medication has on the negative symptoms from which they still suffer.

5. Conclusion & Recommendations

In conclusion, Schizophrenic Patients have particularly deficit in social and functional skills that are required for daily life activities and to satisfy their roles in the community. Hence psychosocial programs emphasizes on providing skills that improve their social interaction, independent living and other outcomes that have clear relevance to community functioning. Also the long duration of stay in a hospital worsens the overall symptoms of schizophrenia and global functioning, and that a quick planned return to normal community life with regular follow-up is preferable Social skill training program had a significant positive effect on social functioning and overall symptoms of schizophrenic patients after receiving social skill training program. A statistically significant positive correlation were detected between dependent variables and patients' related variables such as age, compliance with medication, with whom the patient stays, and numbers of previous hospital admissions. So, the study concluded that, the social skills training program was effective with newly admitted schizophrenics patients concerning enhancing patients, social functioning and reducing severity of symptoms.

Recommendations

1-Social training program should be integrated as an intervention in conjunction with pharmacological therapy without contraindications and it can maximize the effect.

2-Continuous follow-up for schizophrenic patients participating in improvement of the patients social skills training program after 6 months and 12 months to support and boost their learning skills for the sustainability of the improvement.

3-Re application the same programs in all of the psychiatric & outpatients departments. and community setting to improve schizophrenic patients social interaction.

4-Nurses and health providers training to equip them with the social skills to enable them to provide a quality care for schizophrenic patients.

5-Further studies are needed using a larger probability sample for generalization of the results.

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