

# Perceived Social Support and Medication Compliance among Patients with Psychiatric Disorders

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**Abstract:** Current studies about increasing compliance to decrease treatment and healthcare costs have gained more significance. Social support is an important component in the recovery of patients with psychiatric disorders; therefore, it is difficult to ignore its role in improving patient's compliance to treatment. **Aims** This study aimed to assess the levels of perceived social support, medication compliance and their relationship. **Design:** The present study follows a cross sectional design. **Setting:** The study was conducted at the Psychiatric Inpatient Wards of "Tanta University Hospital" and Psychiatry- Neurology and Neurosurgery Center. **Subjects:** The study subjects were 144 psychiatric patients. **Tools:** *Tool (1):* Socio-demographic data sheet *Tool (2):* Multidimensional perceived social support scale (MSPSS) developed by (Zimet et al 1988) to measure perceptions of support from 3 sources: Family, Friends, and Significant Others. *Tool (3):* Drug attitude inventory (DAI) developed by Hogan et al., 1983 to assesses the patient's compliance response. **Results:** (74.3%) of patients had a poor social support and only 21.5% of them had good medication compliance. there was a statistical significant correlation between perceived social support and medication compliance **Recommendations:** development of social skills training program for patients with psychiatric disorders aimed to teach them how to obtain help and support from family , friends, and significant others . Training psychiatric hospital staff to increase their understanding about the importance of their supportive role to provide appropriate nursing intervention for patients with psychiatric disorders.

**Keywords:** social support, medication compliance, patients with psychiatric disorders.

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## 1. INTRODUCTION

In the treatment of psychiatric disorders such as schizophrenia and bipolar disorder the first line choice is drug treatment. The use of drugs in combination with psychotherapy may provide 60-80% efficacy of patient's daily life <sup>(1&2)</sup>. The value of drugs treatment is directly related to the compliance <sup>(3&4)</sup>. The term compliance is used to describe how the patient follows treatment thoroughly <sup>(5)</sup>. It suggests that the patient is submissively following the doctor's orders <sup>(6)</sup>. Patient who do not follow the treatment plan and drug regimens can be described as noncompliant or not adherent <sup>(7)</sup>.

Noncompliance to therapeutic regimen is still a major clinical problem among psychiatric patients. It contributes to increased relapse and re-hospitalization rate, poor quality of life, higher suicide as well as increased costs of care. It's consequences for the individual & society will include ; disability, unemployment and substance use <sup>(3,8&9)</sup>. Lack of insight , negative attitudes towards illness and medication , past substance use, adverse drug reactions, financial constraints , cultural beliefs about treatment and lack of social support are factors that affect medication compliance <sup>(10,9,11,12)</sup>

Social support is defined as the perception and actuality that the person is cared for, being a part of supportive social network, and has assistance available and adequate from others including family members, friends, doctor, nurses, and other health care providers<sup>(13)</sup>. It can be measured as perceived or actual social support. Perceived social support is defined as the belief that one has adequate assistance when needed. Actual support is the variety of helping behavior that one actually gets from other<sup>(14)</sup>.

Social support encompasses emotional, instrumental, informational, and appraisal of the situation. Emotional support is provided to enhance the individual emotional strengths and involve the provision of empathy, kindness, caring, respect, and feeling of being loved. Instrumental support is the most practical type of support and includes financial aids, material resources, and services that getting task done. Informational support is related to the provision of advice and information that help the individual to understand the problem in order to cope. Finally appraisal support is related to help in decision making, and evaluation of the situation and self<sup>(15)</sup>.

Social support is an important treatment factor in the recovery of people with psychiatric disorders<sup>(16)</sup>. Patients with psychiatric disorders may deny that they need medication, may either refuse to take medication or not remember because of cognitive dysfunction. At this time, family member or friends may take an active role in promoting patient compliance by giving practical assistance such reminding them when they forget the drug or having them evaluated by the physician especially if they stop taking their medication<sup>(17,18)</sup>. Moreover, help and support from friends and family have been concerned in promoting patient compliance through encouraging optimism, self-esteem and control, buffering the stresses of being ill which in turn may decrease symptomatology, reducing patient depression, improving sick role behavior<sup>(12, 19)</sup>. It was found that the rate of compliance is higher in patients who live with their family or with people who supervise their drug administration<sup>(20)</sup>. On the other hand family member may be against patient's taking medication when they have negative beliefs and attitudes about medication<sup>(21&22)</sup>.

Support from psychiatric nurses includes teaching patients and their families about how to cope with illness, importance of medication compliance, following up patients, and reinforcing the social support ties between patients and their families. Patients' compliance to treatment could be increased in this way<sup>(23)</sup>. Accordingly, mobilization of social support system may be an important aspect of nursing intervention and it is considered low-cost approaches to improve medication compliance and to promote health outcomes

#### **Aims:**

This study aimed to:

- 1- Assess the level of perceived social support and medication compliance among patients with psychiatric disorders.
- 2- Determine correlation between perceived social support and medication compliance

#### **Research questions:**

- 1- What is the level of perceived social support and medication compliance among patients with psychiatric disorders?
- 2- What is the relation between perceived social support and medication compliance?

## **2. MATERIALS AND METHOD**

**Study Design:** A cross sectional design was utilized in the study.

**Setting:** The study was conducted at the Psychiatric Inpatient Wards of "Tanta University Hospital" with a capacity of (31) beds divided into two wards for male (17beds) and two wards for female (14 beds) and psychiatry- neurology and neurosurgery center with a capacity of (28) beds divided into one ward for male (18beds) and one ward for female (10 beds). Both hospitals are under the supervision and direction of the ministry of higher education

#### **Subjects:**

A convenient sample of 144 psychiatric inpatients was recruited at the previously mentioned settings. The sample size was calculated using Epi-Info software statistical package created by World Health organization and center

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for Disease Control and Prevention, Atlanta, Georgia, USA version 2002. The criteria used for sample size calculation were as follows: 95% confidence limit, expected percentage of patients with good compliance of >60% of total score is 40% .The subjects meet the following criteria:

### Inclusion Criteria of the Study

- 1- Agree to participate in the study.
- 2- A history of disease for at least 2 years
- 3- Between 18 and 60 years old
- 4- Able to communicate in relevant and coherent manner

### Exclusion Criteria of the Study

- 1- Patients hospitalized for the first time
- 2- Patients with organic brain syndrome or mental retardation

### Tools of the study:

Three tools were used to collect data for this study

#### Tool I: Socio-demographic and clinical characteristics structured interview schedule:

It was developed by the researcher after reviewing the related literature. Socio-demographic data includes patient's age, gender, level of education, occupation , income ,residence , and with whom he\she live , clinical characteristics includes, duration of illness , number of Previous admission, mode of admission , stigma of mental illness , side effects of drugs, substance use disorder , insight, and medical diagnosis.

#### Tool II: Multidimensional perceived social support scale (MSPSS)

It was developed by (Zimet et al 1988) <sup>(24)</sup>.It is a self-rated measure designed to measure perceptions of support from 3 sources: Family, Friends, and Significant Others. The scale comprises of three subscales each addressing a different source of support and measured by four items. Family (items 3,4,8,and 11), friends( items 6,7,9,and 12), and significant others (items 1,2,5,and10). The support from family includes parents, siblings, children and wife or husband. The support from significant others includes special partner, service staffs, organizations and or neighbors. Responses are made on a seven -point Likert scale ranging from very strongly agrees (7) to very strongly disagree (1). The minimum and maximum score that can be acquired from each total score is 12 and 48 respectively, and 4 and 28 respectively for each subscale. A total score of 12–48 is taken as poor perceived social support, 49–68 as moderate and 69–84 as high perceived social support

#### Tool III: Drug attitude inventory (DAI)

It was originally developed by Hogan et al., 1983. <sup>(25)</sup> The DAI consisted of 30 items divided into (15) true statements and (15) false statements . It is used to assesses the patients compliance response and their attitudes toward medication through gaining some understanding of what they think about medications and what experiences they have .it provides unique information of clinical relevance for monitoring treatment compliance . A correct answer of these items will be scored as plus 1 and an incorrect answer of these items will be scored as minus 1 and. the total score is the sum of pluses and minuses. A positive total score means a compliant response and a negative total score means non- compliant response. At the present study the score calculated as follow; less than (<50 %) indicates Poor medication compliance , score of (50-75 %) indicates moderate compliance while a score of (>75) indicates good medication compliance

### Method:

An official letter was issued from the dean of the Faculty of Nursing, Tanta University to The Director of the neuropsychiatric department in Tanta university hospitals to obtain permission and cooperation to collect the data for the study.

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Tools (1) and (2) were translated into Arabic language by the researchers, and tested for translation accuracy and content validity by a group of five experts in the psychiatric nursing and medicine fields. Required corrections were done accordingly

The validated tools were then tested for their reliability using Cronbach's alpha. Cronbach's alpha value= (0.659) indicating acceptable internal consistency.

A pilot study was carried out on 14 mentally ill patients selected randomly to ensure the clarity and applicability of the study tools and to estimate the approximate time required for interviewing the participants as well as to find out any problem or obstacle during data collection. Those patients were excluded later from the actual study. The pilot study proved the applicability of the study tools .

During the actual study, the researcher selected the study subjects who met the inclusion criteria then, clinical data was double checked by reviewing patient's medical record. Each patient was contacted on individual basis by the researcher using interviewing technique. Each interview lasted between 30 to 45 minutes. Data collection lasted over a period of 4 months starting January 2017 to April 2017

### Ethical considerations:

- 1) An informed consent to participate in the study was obtained from the study subjects. This was done after explaining the purpose of the study and emphasizing the right to withdraw from the study at any point.
- 2) Subjects' privacy was maintained throughout the interview.
- 3) Collected data were used only for the purpose of the research and kept confidential

### Statistical analysis:

The collected data were organized, tabulated and statistically analyzed using SPSS version 19 (Statistical Package for Social Studies) created by IBM, Illinois, Chicago, USA 2002. For numerical values the range mean and standard deviations were calculated. The differences between two mean values were used using student's t test. Differences of mean values between more than two groups were tested by analysis of variance (F). Mann-Whitney and Kruskal-Wallis tests were used instead of t test and analysis of variance when data were not found to follow the normal distribution. For categorical variable the number and percentage were calculated. The correlation between two variables was calculated using Pearson's correlation coefficient. The level of significant was adopted at  $p < 0.05$ .

## 3. RESULTS

**Table (1): Socio-demographic characteristics of studied subjects**

Variables	Number (n=144)	%
<b>Age in years:</b>		
<20	6	4.2
20-	49	34.0
30-	45	31.3
40-	25	17.3
50-	18	12.5
60-	1	0.7
Range		17-60
Mean±SD		33.99±10.74
<b>Sex:</b>		
Males	75	52.1
Females	69	47.9
<b>Marital status:</b>		
Single	81	56.3
Married	50	34.7

Divorced	9	6.3
Widow	4	2.8
<b>Educational level:</b>		
Illiterate	9	6.3
Primary	40	27.8
Secondary	62	43.1
University	33	22.9
<b>Employment :</b>		
Employed	61	42.4
Unemployed	83	57.6
<b>Residence:</b>		
Urban	65	45.1
Rural	79	54.9
<b>Income:</b>		
Not enough	81	56.3
Enough	63	43.8
<b>Living accommodation:</b>		
Family	133	92.4
Alone	11	7.6

Table (1) shows the socio-demographic characteristics of the studied subjects. It was found that psychiatric patients age ranged between 17 to 60 years with a mean age of  $33.99 \pm 10.74$  years. More than half 52.1% were male. Patients who were single constituted (56.3%) and nearly one third of the subjects (34.7%) were married. It can be noticed that about forty three percent (43.1%) of the studied patients had a secondary education and only (6.3%) were illiterate. Unemployed patients represented (57.6%). More than half of the studied sample (54.9%) was living in rural areas. The majority of them (92.4%) live with their family and (56.3%) hadn't enough income.

Table (2): Clinical characteristics of studied subjects

Variables	Number (n=144)	%
<b>Disease onset:</b>		
<5	70	48.6
5-	34	23.6
10-	16	11.1
15-	8	5.6
20±	16	11.1
Range		1-31
Median		5
Mean±SD		7.19±6.38
<b>Previous hospitalization:</b>		
1	2	1.4
2	74	51.4
3	25	17.4
4	20	13.9
5±	23	15.9
Range		1-15
Median		2
Mean±SD		3.48±2.57
<b>Current hospital admission:</b>		
Willingly	64	44.4
Unwillingly	80	55.6
<b>Suffering from disease stigma</b>		
	60	41.7
<b>Suffering from medications side effects</b>		
	117	81.3
<b>Most common annoying side effects:</b>		
Mouth dryness	76	52.8
Blurring of vision	78	54.2

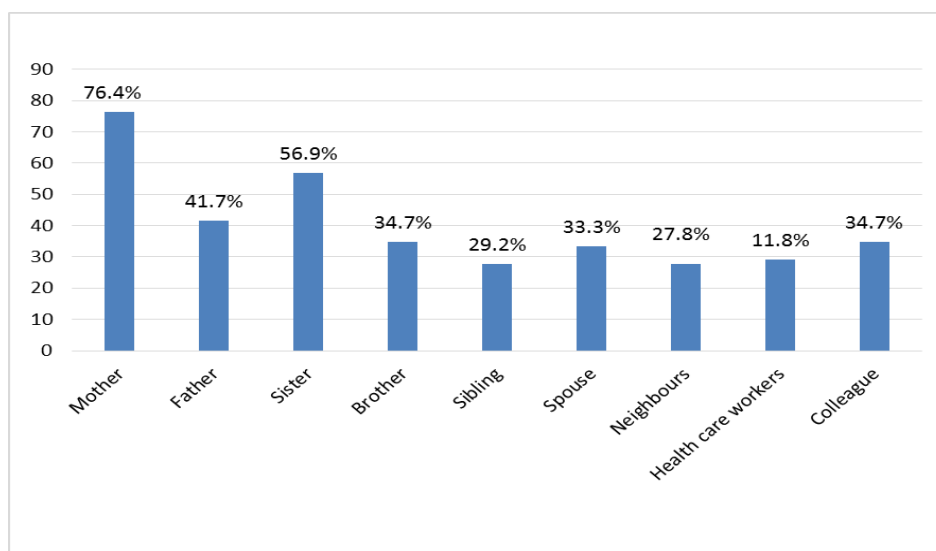
Fainting	73	50.7
Loss of concentration	55	38.2
Hand tremors	24	16.7
Ocologyric crisis	55	38.2
Constipation	46	31.9
<b>Having insight</b>		
Yes	60	41.7
No	84	58.3
<b>Diagnosis:</b>		
Schizophrenia	60	41.7
Bipolar disorder	38	26.4
Schizoaffective disorder	18	12.5
Psychotic depression	28	19.4

Table (2) shows clinical characteristics of studied patients. It was found that ( 48.6%) of the studied subjects had onset of illness less than 5 years while only (5.6 %) had more than 15 years with a total Mean of  $7.19 \pm 6.38$  and median of 5 years. Concerning the previous hospitalization nearly half of the studied patients (51.4%) were admitted previously twice and only (13.9%) had four previous admissions with a median of 2 times. More than half of the studied patients (55.6%) were admitted involuntary. The majority of patients 81.3% Suffering from medications side effects and the most common annoying side effects are blurring of vision, mouth dryness, and fainting (54.2%, 52.8%, &50.7%) respectively . More than half of the studied subjects (58.3%) haven't insight by illness and (41.7%) were diagnosed with schizophrenia.

**Table (3): Distribution of studied patients by their perception of social support**

Social support scale	Poor		Moderate		High	
	N	%	N	%	N	%
Family support	61	42.4	39	27.1	44	30.6
Friends support	91	63.2	37	25.7	16	11.1
Significant others support	96	66.7	33	22.9	15	10.5
perceived social support total score	107	74.3	30	20.8	7	4.9

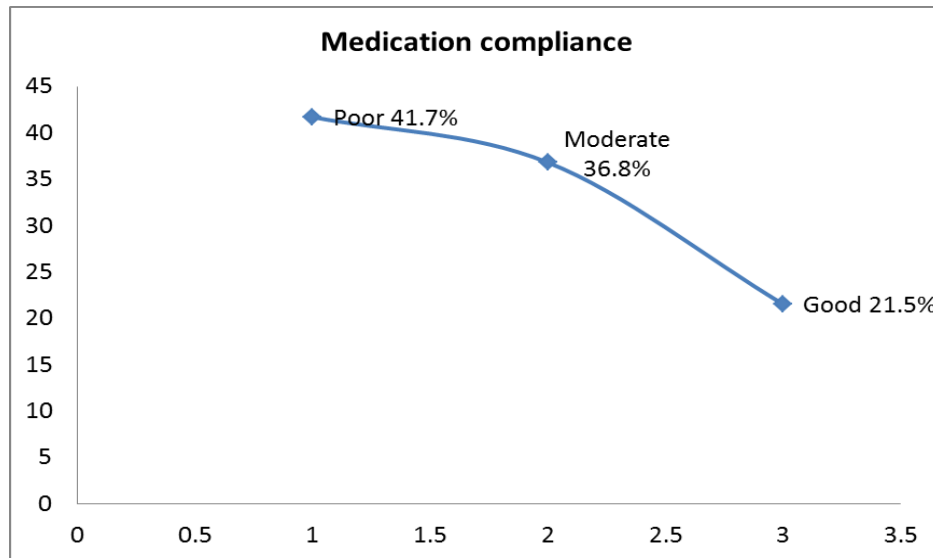
**Table (3)** reveals perceived social support among studied patients , it was found that (74.3%) of patients perceive their social support as poor and only (4.9%) perceive it as high. The highest sense of social support was found in family subscale (30.6%) followed by friends (11.1%) and lastly significant others (10.5%)



**Figure (1) Sources of social support as perceived by the psychiatric patients**

**Answers are not mutually exclusive:**

This figure illustrated the sources of social support as perceived by psychiatric patients. The highest source of support was from mother 76.4%, sister 56.9%, followed by father 41.7%, spouse 33.3%, and only 11.8% from health care providers.



**Figure (2): Distribution of studied patients by their level of medication compliance**

This figure demonstrates that only 21% of the studied subjects have good medication compliance while 42% poorly compliant with medication.

**Table (4): Distribution of studied patients in relation to factors affecting medication compliance and social support**

Variables	Medication compliance score			Social support score		
	Mean±SD	t/F	P	Mean±SD	t/F	P
<b>Gender:</b>		0.288	0.774			
Males	53.96±24.96			51.19±15.90	0.293	0.770
Females	55.12±23.53			52.07±19.76		
<b>Marital status:</b>		1.141	0.256			
Ever married	57.67±24.67			56.07±18.73	2.156	0.034*
Not married	52.84±23.92			49.24±16.90		
<b>Educational level:</b>		6.841#	0.003*			
Illiterate	37.78±21.67			40.33±16.52	4.070#	0.131
Primary/secondary	53.33±24.56			52.72±18.02		
University	62.73±21.08			51.25±16.80		
<b>Job:</b>		1.956	0.052			
Employed	59.07±25.88			58.08±16.57		
Unemployed	51.16±22.47			46.44±17.12	4.115	0.001*
<b>Residence:</b>		0.840	0.402			
Urban	56.36±22.40			49.04±18.39	1.581	0.116
Rural	53.00±25.71			53.73±17.12		
<b>Income:</b>		1.447	0.150			
Not enough	51.22±24.82			53.33±19.43	1.317	0.190
Enough	57.08±23.55			49.40±15.32		
<b>Living accommodation:</b>		4.539	0.001*			
Family	64.11±23.26			52.48±17.63	2.198##	0.028*
Alone	46.83±22.16			41.08±17.06		
<b>Current hospital admission</b>				53.01±18.80		

Willingly	55.19±24.68	1.265##	0.206	50.59±17.06	0.805	0.422
Unwillingly	46.36±16.09					
<b>Having insight:</b>		7.092	0.001*		5.077	0.001*
No	44.09±20.68			45.74±15.82		
Yes	69.11±21.14			59.84±17.25		
<b>Suffering stigma:</b>		1.573	0.118		0.496	0.621
No	57.18±23.13			52.53±21.02		
Yes	50.78±25.37			50.96±15.18		
<b>Medication side effects</b>		2.972	0.003*		1.363	0.175
No	66.67±23.70			47.12±21.59		
Yes	51.71±23.54			52.58±16.76		
<b>Diagnosis:</b>						
Schizophrenia	47.65±15.02	5.404		53.89±21.37	2.605	0.054
Bipolar disorder	64.06±12.97			61.93±28.47		
Schizoaffective disorder	55.10±17.16		0.002*	43.33±23.09		
Psychotic depression	47.35±22.37			52.98±22.25		

\* Significant

# Kruskal-Wallis test

## Mann-Whitney test

Factors affecting medication compliance and social support appears in table (5). A statistical significant difference in the mean scores of medication compliance related to their educational level, insight, living accommodation, and side effect of medication. The mean score of medication compliance of patients who were highly educated, having insight, living with their families, and haven't side effect of medication were significantly higher than those who were illiterate, haven't insight, living alone, and haven't side effects of medications ( $t = 6.841, p = 0.003, t = 7.092, p = 0.001, t = 4.539, p = 0.001, t = 2.972, p = 0.003$  respectively). As regards perceived social support, a statistical significant difference in the mean scores of perceived social support related to their marital status, employment, insight, and Living accommodation. The mean score of perceived social support of patients who were married, employed, having insight, and living with their families were significantly higher than those who not married unemployed, haven't insight, and living alone ( $t = 2.156, p = 0.034, t = 4.115, p = 0.001, t = 5.077, p = 0.001, t = 2.198, p = 0.028$  respectively).

**Table (5): Correlation between perceived social support, medication compliance, age, onset of disease and duration of hospitalization**

Variables	Perception of social support		Medication compliance	
	R	P	r	P
Age in years	-0.161	0.054	-0.183	0.028*
Onset of disease	0.091	0.279	0.023	0.787
Number of hospitalization	-0.099	0.239	-0.017	0.840
Social support total score			0.360	0.001*
Family			0.339	0.001*
Friends			0.319	0.001*
Significant others			0.089	0.291

\*Significant

The relation between perceived social support and medication compliance is shown in table (5), A statistically significant positive correlation was evident between perceived social support (total score, family and friends subscales) and medication compliance. There was also a significant negative correlation between age and medication complication, the older the age the less compliance with medication.



#### 4. DISCUSSION

Social support provides confidence for the patients especially with psychiatric disorders. These patients need to be accepted as a human being by helping them to cope with life and illness-related stresses and comply with medication. Worldwide, non-compliance rates among patients with mental illness ranged between 30% and 65%. As a result of noncompliance, a large numbers of patients do not benefit from medication, resulting in increased morbidity and mortality as well as increased societal costs<sup>(10,26-28)</sup>.

The present study showed that only twenty-one percent of the studied subjects had good medication compliance and forty-one percent had poor medication compliance. This may be attributed to the working environment in the setting of this study which focuses mainly on providing the routine hospital care rather than educative and rehabilitative care that focus on the importance of patient's follow up to check medication compliance. This comes in accordance with the findings of studies carried out by Amr et al (2013) and Adelufosi et al (2012).<sup>(29&30)</sup> On the contrary Yılmaz and & Buzlu (2012) reported that 47.9% of the patients had a high adherence to treatment and 8.5% had non-adherence to treatment.<sup>(31)</sup>

It can be inferred from a broad range of theoretical work that noncompliance in psychiatric patients may be in part affected by several factors that are consistent with the findings of the current study. The present study found that medication compliance was significantly higher in patients who had insight. This is may be due to conscious awareness of the presence of an illness and importance of treatment regimen. In this respect, Lacro et al, (2002) reported that psychotic patients, who lack insight into their illness, may deny the need for treatment, and are presumed to exhibit less medication adherence than other patients<sup>(32)</sup>. Additionally, Novick et al (2015) claimed that better insight was associated with higher adherence.<sup>(33)</sup>

Medication noncompliance is significantly higher in schizophrenia, psychotic depression, and schizoaffective disorder, than in bipolar disorder. This might be attributed to higher rate of the prescription of typical antipsychotics and related side effects such as the extrapyramidal which may impede adherence. Moreover lack of insight and residual psychopathology are more common in patients with schizophrenia in comparison to those with other diagnosis might have negatively affected adherence. This is supported by the finding of Ibrahim et al (2015)<sup>(34)</sup> who documented that medication non adherence was higher in schizophrenia versus bipolar patients. Contrary to this finding, a study found that noncompliance to medication is likely to be diagnosed with bipolar disorder.<sup>(35)</sup>

Level of education is considered among factors affecting medication compliance. Patients who are highly educated are significantly more compliant than illiterate patients. This may be due to more opportunity of access to health related information .In this respect two studies found that patients with low education are less likely to be compliant to their medication treatment<sup>(36)</sup>. Similarly, Col et al (2014) found that as the educational level increased, adherence to treatment increased initially and decreased afterward<sup>(37)</sup>. In contrast, a study by Andrea et al (2010) who concluded that the level of education did not affect medication compliance<sup>(38)</sup>.

Other variable that found to predict poor compliance significantly was side effects of medication. Those who haven't side effects were significantly compliant than those who have. This finding is in the same line with results of Ibrahim et al (2015) who found that side effects profiles have a statistical significant association with non adherence<sup>(34)</sup>.

Regarding correlation between medication compliance and age, it was found that there was significant negative correlation between age and medication compliance, the older the age the poor compliance with medication. Older patients couldn't adhere to treatments because of cognitive impairment, including working memory loss and impaired executive performance<sup>(39)</sup>. Along with this finding a study conducted by Eticha et al (2015) who stated that older age group were associated with less medication adherence<sup>(40)</sup>. In contrast a study conducted by Maan et al (2015) has reported that young patients have a low compliance rate<sup>(41)</sup>.

One of the most devastating penalties of severe mental illnesses is the interruption of interpersonal relationships. This can be speculated by the finding of the current study which stated that seventy four percent of the studied patients had poor social support. Along with the same line a study conducted by Munikanana et al (2017) stated that about 72% of the respondents had poor perceived social support<sup>(42)</sup>.

This may be attributed to more than one explanation. First, patients become generally apathetic, inactive, having poverty of speech, socially withdrawn and showed disinhibited behaviors which typically are stable features of patients in this study. Second, People are often hesitant to frequent contact with those patients under such conditions because they find such distortions in normal behaviors more upsetting and impose considerable pressure to deal with. Third, patients may also refuse assistance as they are not adversely affected by social isolation. Consequently, others don't provide support if the patients doesn't hint being in need of help. This explanation was supported by wilder and willis et al (2002)<sup>(43)</sup>.

Family members are considered the most important part of social support for individuals with a psychiatric disorder.<sup>(44)</sup> This goes with the results of the current study, where the highest sense of social support was found in the family, more specifically mother followed by sister then father and spouse. This may be because most of the patients in this study live with their families, which explain the higher level of social support received from family. Moreover, it is not surprising considering it in Egyptian culture, responsibilities towards the immediate family members have the highest priority, and precede loyalty toward other parties such as friends. Furthermore, more than half of studied subjects live in rural area which characterized by empathetic & own individualities in terms of belief systems. It is a stigma for rural family to leave their patient cared by another person except in emergency and hospitalization.

On the other side, a very small percent of the studied subjects received high level of social support from significant others, more specifically from health care providers. This means that social support from health care providers was insufficient. Low social support from significant others including the health care providers may be because they are usually loaded with a high number of patients which limit their ability to attend to the patient's social needs. Moreover, Symptom control is the health care teams' primary focus rather than their supportive role. In this respect, a study by Munikanana et al (2017)<sup>(42)</sup> reported that social support which scored the lowest was from significant others including health care providers.

Regarding the factors affecting social support, the present study showed that social support was significantly higher with employed, married, having insight, and living with their family than those who unemployed, unmarried, haven't insight, and living alone. This may be explained by having insight help patient to perceive reality accurately and improve relationship with others. Also the employment enriched social network and social support. These results are in accordance with Zahid & Ohaeri (2010) and Galuppi et al. (2010) who explained it by the fact that employed attained a better social relationship, had aspirations to live like normal people, financially satisfied, and had better global functioning<sup>(45&46)</sup>.

The current study revealed that there is a statistically significant positive correlation between perceived social support total score, family, and friend subscale and medication compliance. The patients with a higher compliance to treatment are observed to have higher family, friend and social support in total. Again, Presence of support from family gives long-term positive results in the treatment of patients<sup>(44)</sup>. Patients with psychiatric disorders may lack awareness of having an illness, may either refuse to take medication or not remember because of cognitive dysfunction. At this time, family member or friends may take an active role in promoting patient compliance by giving practical assistance such reminding them when they forget the drug or having them evaluated by the physician especially if they stop taking their medication<sup>(17)</sup>. Moreover, help and support from friends and family have been concerned in enhancing patient compliance through encouraging optimism, self-esteem, buffering the stresses of being ill which in turn may decrease symptomatology, reducing depression, and improving sick role behavior<sup>(12, 19)</sup>.

In this respect Marsha (2015)<sup>(47)</sup> reported that social support found to be a predictor of compliance. Along the same line, Rekha et al (2005) stated that lack support and help from family members and friends as the causes of poor drug compliance in the patients<sup>(48)</sup>. In contrast, another study stated that the role of family support was not emphasized sufficiently in medication compliance, this may be because of negative attitudes of families regarding drug and disease and high levels of emotional expression<sup>(49)</sup>.

## 5. CONCLUSION AND RECOMMENDATION

According to the findings of the present study, it can be concluded that studied patients with psychiatric disorders had poor social support and medication compliance. Social support from family and friends were proved to be an important component of nursing intervention aimed to increase patient's compliance with medication.

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### Based on the results of this study the following recommendations are suggested:

- Development of psycho-educational program for psychiatric patients to increase their compliance with medication.
- Development of social skills training program for patients with psychiatric disorders aimed to teach them how to obtain help and support from family, friends, and significant others.
- Training of psychiatric hospital staff to increase their understanding about the importance of their supportive role to provide appropriate nursing intervention for patients with psychiatric disorders.

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**International Journal of Novel Research in Healthcare and Nursing**

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