

Relationship between Perceived Social Support, Level of Functioning and Recovery among Patients with Schizophrenia

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Abstract

Background: Patients with schizophrenia are likely to have more difficulty than the rest of the community in the areas of social supports, activities of daily living, and recreational activities. Patients' social support is considered to be a critical factor in the prognosis of schizophrenia. **Aim of the study:** To examine the relationship between perceived social support, level of functioning and recovery among patients with schizophrenia. **Study design:** A descriptive correlational research design was utilized. **Setting:** The study was conducted at the outpatient clinics of Psychiatric and Mental Health Hospital at Benha city, Qalyubia governorate. **Study subjects:** A purposive sample of 200 patients with schizophrenia. **Tools of data collection:** Four tools were used for data collection: **Tool (I)** A structured interviewing questionnaire including socio-demographic data and clinical data, **Tool (II)** Multidimensional Perceived Social Support Scale (MSPSS), **Tool (III)** Recovery Assessment Scale (RAS). **Tool (IV)** WHODAS 2.0 (Functional Limitations and Level of Disability). **Results:** 68% of the studied patients had mild level of perceived social support, (69.5%) of the studied patients had moderate level of recovery. Also, (86.6%) of the studied patients had high level of total functioning limitation and disabilities. **Conclusion:** The study concluded that there was a highly statistically significant positive correlation between the studied patients' total score of perceived social support and total score of recovery. While, there were a highly statistically significant negative correlations between total score of functioning limitation and disabilities and total score of perceived social support and also total score of recovery. Patients' social support is considered to be a critical factor in the prognosis of schizophrenia. **Recommendations:** Psycho-motivational training should be applied for patients with schizophrenia to improve their perceived social support, level of functioning and recovery.

Keywords: Functioning, Recovery, Schizophrenia, Social support

Introduction:

Schizophrenia is generally a severe mental illness with a lifetime prevalence of about 1% of the population worldwide, and a major cause of global disease burden (McCutcheon et al., 2022). Symptoms typically begin in late adolescence or early adulthood, and can be separated into three domains: (1) positive (e.g., hallucinations, delusions, paranoia and

thought disorder), (2) negative (e.g., anhedonia, avolition, social withdrawal and thought poverty) and (3) cognitive (e.g., dysfunction in attention, working memory and executive function) (Kaar et al., 2022).

Schizophrenia is a psychiatric disorder characterized by continuous or relapsing episodes of psychosis. People with schizophrenia often have problems doing well

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in society, at work, at school, and in relationships. They might feel frightened and withdrawn, and could appear to have lost touch with reality. This lifelong disease can't be cured but can be controlled with proper treatment. This means that person has difficulty in thinking clearly, knowing what real, managing feelings are, making decisions and relating to other (**National Institute of Mental Health, 2022**).

Individuals who are diagnosed with schizophrenia struggle in many areas such as performing social life activities, communicating, maintaining their self-care, managing spare time, and coping with stress. These difficulties can lead to a decrease in the level of individuals' functionality in many areas. There are a variety of personal and social barriers that contribute to reduced social support. These barriers include social skills deficits, psychiatric symptoms individuals experience, reduced social roles, and stigmatization. When these situations, which can expose individuals to bad living conditions and various stigmatizations from time to time, are examined, it is seen that the concepts of self-sufficiency and social support are effective on functionality levels (**Ata et al., 2022**).

Moreover, the negative effect of not getting enough love and support from the environment on social support levels causes individuals to experience internalized stigmatization, pushes them to believe that they have no place in society, and makes it difficult for them to adopt life and distract them from the search for meaning. One of the most important factors affecting recovery is social support. Perceived social support is a general belief that individuals form at various stages of their lives, showing that they are valued, cared for, and that people from whom these individuals will receive help when they

feel the need are satisfied with the relationships they have (**Kokeren & Demir, 2022**).

Cognitive impairment associated with schizophrenia (CIAS) – spanning impairment of memory, executive function and processing speed – is associated with poorer functional outcomes. This highlights the need to understand the neurobiology underlying the symptoms of schizophrenia, particularly cognitive impairments, to identify new treatment targets (**Arumham et al., 2023**).

Both cognitive impairments and negative symptoms are consistently related to poor social functioning outcomes and impose a great economic burden on families and society. There is ample evidence that supports some associations between negative symptoms and cognitive function, but the interplay between negative and cognitive symptoms and their impact on social functioning are highly complex, and multiple factors, such as the heterogeneity of the patient, should be considered (**Chareernboon, 2021**).

Five main categories of nursing interventions, nurses use it to support patient's quality of life to improve patient's recovery and level of functioning such as empowering interventions, social interventions, activating interventions, security interventions and care planning interventions. Empowering interventions are actions where the nurses show interest, discuss, encourage, give information, maintain hope, and motivate (**Ventosa et al., 2022**).

Significance of the study

Schizophrenia affects approximately 24 million people or 1 in 300 people (0.32%) worldwide. This rate is 1 in 222 people (0.45%) among adults. About 0.3% to 0.7% of people are diagnosed with schizophrenia

during their lifetime. In 2017, there were an estimated 1.1 million new cases and in 2019 a total of 20 million cases globally (**Institute of Health Metrics and Evaluation (IHME), 2021; James & Abate, 2018**). Patients with schizophrenia are likely to have more difficulty than the rest of the community in the areas of their social supports, activities of daily living, and recreational activities. Patients' social support is considered to be a critical factor in the prognosis of schizophrenia (**Vaingankar et al., 2019**).

There is a growing body of research that has documented many of the positive effects that high levels of perceived social support has on mortality and morbidity, level of functioning, and or treatment adherence or recovery among people with schizophrenia (**Norman et al., 2021**). In the other hand, lack of perceived social support has many adverse consequences such as influencing the onset and course of schizophrenia; exacerbate schizophrenia outcomes such as high relapse rate, poor recovery, poor medication adherence and impairment in personal and social functioning, become dependent, reduced activity, productivity, decreased relationship and affect quality of life (**Mekonnen et al., 2019**).

Aim of the study:

This study aimed to examine the relationship between perceived social support, level of functioning and recovery among patients with schizophrenia.

Research Questions:

1. What are the levels of perceived social support, functioning and recovery among patients with schizophrenia?
2. What are the relationship between perceived social support, level of functioning and recovery among patients with schizophrenia?

Subjects and Method:

Research Design:

A descriptive correlational research design was utilized in this study.

Research Setting:

This study was conducted at the outpatient clinics of Psychiatric and Mental Health Hospital at Benha city, Qalyubia Governorate, which is affiliated to the General Secretariat of Mental Health in Egypt. It has 2 buildings, the first one has (6) departments (4 male, 1 female and 1 outpatient clinic) and the second one has 1 Addiction department, with capacity of 219 beds. The outpatient clinic in the ground floor which working daily. This hospital provides care for patients diagnosed with acute and chronic mental illnesses who need institutional care, receiving new cases for treatment and providing follow up for patients after discharge.

Research Subjects:

Sample size:

The sample size calculated according to slovin's formula for determination of the sample size (**Rayan, 2013**).

$$n = \frac{N}{1+N(e)^2}$$

n=sample size

N=population size is 400

e=margin of error

Sample type:

A purposive sample of 200 patients with schizophrenia was taken from the above mentioned setting according to the following criteria: both sexes, age from 18 – 65 year, free from other psychiatric disorders, able to communicate and agreed to participate in the study

Tools for data collection:

Data collection was conducted using the following tools:

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Tool (1): Structured Interview Questionnaire:

The questionnaire was developed by researcher based on scientific review of literature and it was consisted of two parts:

Part I: Socio-demographic data which included age, sex, educational level, marital status, job, residence, income level and cohabitation.

Part II: Clinical data which included type of schizophrenia, age of onset of the disease, frequency of hospitalization, frequency of visits to outpatient clinics, treatment compliance, family history with mental illness, if there is a family history what is mental illness and what is relationship with this patient).

Tool (2): Multidimensional Perceived Social Support Scale (MSPSS):

This scale was developed by **Zimet et al., (1988)**. It designed to measure perceived social support of the patients. It consisted of 12 items. It rated on a three-point Likert scale ranged from: “agree = 3, neutral = 2, disagree = 1”. The scale has three subscales each consisting of 4 items to determine the support from family (items 3, 4, 8 &11), support from friend (items 6, 7, 9 &12) and support from significant others (items 1, 2, 5 &10).

Scoring system:

The lowest and highest scores obtained from subscales are 4 and 12 respectively. Total score is ranging from 12 to 36. Obviously the higher the score points, the greater the perceived social support.

- 12 to 20 indicate mild perceived social support.
- 21 to 28 indicate moderate perceived social support.
- 29 to 36 indicate high perceived social support.

Tool (3): Recovery Assessment Scale (RAS):

This scale was developed by **Giffort et al., (1995)**. The RAS has 24 items to assess recovery level among patients with mental disorder. All items are rated using the same 5-point Likert scale that ranged from 1 = “strongly disagree” to 5 = “strongly agree.” The RAS’s subscales measure five domains: Personal confidence and hope (9 items) as “I have my own plan for how to stay or become well”, willingness to ask for help (3 items) as “I know when to ask for help”, goal and success orientation (5 items) as “I have goals in life that I want to reach”, reliance on others (4 items) as “I have people I can count on”, no domination by symptoms (3 items) as “Coping with my mental illness is no longer the main focus of my life”.

Scoring system:

Total score is ranged from 24 to 120. Obviously the higher the score points, the greater the recovery.

- 24 to 56 indicate mild recovery.
- 57 to 88 indicate moderate recovery.
- 89 to 120 indicate high recovery.

Tool (4): WHODAS 2.0 (Functional Limitations and Level of Disability)

This scale was developed by **Ware & Sherbourne, (1992)** and modified by **Roth et al., (2021)**. It was designed to assess functioning, disability, and health-related quality of life developed by the WHO and consists of 36-items. It rated on 5-point Likert scale ranged from none = 1, mild = 2, moderate = 3, severe = 4 and extreme or cannot do = 5. It is based on the concepts of the international classification of functioning, disability and health and consists of six domains: Cognition (understanding and communication), mobility (moving and getting along), self-care-hygiene (dressing, eating, and staying alone), getting along

(interacting with other people), life activities (domestic responsibilities, leisure, work, and school) and participation in society (joining in community activities).

Scoring system

Higher scores indicate a higher degree of functional limitation and disabilities. Total score is ranging from 36 to 180 scores.

- 36 to 84 indicate mild level of functioning.
- 85 to 132 indicate moderate level of functioning.
- 133 to 180 indicate high level of functioning.

Preparatory phase:

An extensive review of available literature related to the study area was done including electronic dissertation, available books, articles, researches and periodicals to acquire the needed knowledge to conduct this study and to prepare the necessary tools of data collection.

Content Validity:

The tools were reviewed for appropriateness of items and clarity, comprehensiveness and applicability of the questions by a Jury of five experts in psychiatric and mental health nursing field. According to their opinions, modifications were done and the final form was developed. Some modifications were done in tool (2) Multidimensional perceived social support scale was modified in the scoring system from a seven-point likert scale ranging from “very strongly agree = (7) to very strongly disagree = (1) to 3 point likert type is used in this scale: “agree = (3), neutral = (2) and disagree = (1)”.

Reliability of the tools:

The study tools were tested for its' internal consistency by Cronbach's Alpha by administration of the same tool to the same subject under similar condition. Alpha Cronbach reliabilities analysis for perceived

social support scale was .924, for recovery assessment scale was .848 and for functional limitations and level of disability was .901.

Ethical considerations:

The researcher clarified the aim of the study to the patients and they were assured for maintaining anonymity and confidentiality. Patients' consent was taken, the studied patients were informed that they are allowed to participate in the study and they have the right to withdraw from it at any time. The nature of the study does not cause any harm to the studied patients.

Pilot study:

A pilot study was conducted to test the clarity, reliability, and applicability of tools. To achieve that, the study was tested on 10% (20) of the patients. This sample was included to the actual study sample according to the result obtained from data analysis.

Result of pilot study:

After conducting the pilot study, it was found that:

1. The tools were clear and applicable and no modifications were made.
2. Tools were relevant and valid.
3. No problem that interferes with the process of data collection was detected.
4. Following this pilot study, the tools were made ready for use.

Field work:

- 1- The researcher was introduced himself to the patients who agreed to be included in this study and met the inclusion criteria.
- 2- The purpose of the study was simply explained to the patients prior to any data collection.
- 3- Oral consent was obtained after explanation of the aim.
- 4- Each patient interviewed and assessed individually in the outpatient clinic in waiting area.

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- 5- Each patient was handled the questionnaire and answered it under observation of the researcher. Patients who can't read well, the researcher help them to record their answers.
- 6- The average time needed to complete the study tools was around 40 minutes, the Socio-demographic and clinical data filled in about 10 minutes, Multidimensional Perceived Social Support Scale (MSPSS) filled in about 10 minutes and Recovery Assessment Scale (RAS) filled in about 10 minutes and (WHODAS 2.0 (Functional Limitations and Level of Disability) filled in about 10 minutes.
- 7- The process of data collection took about 6 months started from June 2022 to November 2022 and occurred 2 days per week (Saturday and Tuesday), about 4-5 patients per day, 8-9 patients per week, 33-34 patients per month.

Administrative design:

A written letter was issued from the dean of faculty of nursing, Benha University to obtain the approval for data collection from the director of psychiatric mental hospital at Benha City, Qalyubia governorate and from general secretariat of mental health in Egypt to conduct the proposed study. An official approval was obtained from the human rights protection committee and research committee of general secretariat of mental health in Egypt after revision of the study protocol and tools, then an official approval was obtained from the director of the psychiatric mental health hospital. The aim and the nature of the study were explained to the administrative personnel.

Statistical analysis:

Upon completion of data collection, the collected data were organized, tabulated; statistically analyzed by using an IBM

personal computer with Statistical Package of Social Science (SPSS) version 22. Data were presented using descriptive statistics in form of number and percentage, mean, standard deviation, and Qualitative variables were comparing using the Chi-Square test. For quantitative data, person correlation coefficient (r) was used for correlation analysis and degree of significance was identified:

- A highly statistically significant when .P-value < 0.001.
- A statistically significant difference was considered when P-value < 0.05.
- Non-significant difference was considered when P-value > 0.05.

Results:

Table (1) illustrates that, more than one third (38%) of the studied patients their age ranged from 28 - < 38 years with mean age 20.71 ± 1.21 and more than half (57%) of them are male. Also, less than one third (30%, 30%) of them had illiterate and secondary education, respectively. As well as, more than half (55%) of them are single, the most (95%, 95%) of them aren't working and are living in rural area, respectively. Also, three quarters (75.0%) of them haven't enough income and majority (85%) of them were living with their family.

Table (2) shows that, more than two fifths (46%) of the studied patients have residual type of schizophrenia, less than three quarters (70%) of them have 15 - < 20 years at the onset of the disease, nearly one third (31%) of them have from 1 to 3 times frequency of hospitalization. Also, three quarters (75%) of them visited the outpatient clinics once a month, more than half (55.5%) of them are taking psychiatric medications regularly, most (85%) of them have no family history of mental illness. Furthermore, all (100%, 100%) of the studied patients who

have family history of mental illness their family have schizophrenia and the ill relatives are brother\ sister, respectively.

Figure (1) demonstrates that, more than two thirds (68%) of the studied patients have mild level of perceived social support, while less than one third (29%) of them have moderate level of perceived social support and minority (3%) of them have high level of perceived social support.

Figure (2) displays that, more than two thirds (69.5%) of the studied patients have moderate level of recovery. While, there are one fifth (20%) of them have mild level of recovery and less than one fifth (10.5%) of them have high level of recovery.

Figure (3) reveals that, most (86.6%) of the studied patients have high level of total functioning limitation and disabilities. While, the minority (9.5%, 4%) of them have moderate and mild levels of total functioning limitation and disabilities, respectively.

Table (3) reveals that, there is a highly statistically significant positive correlation between the studied patients' total score of perceived social support and total score of recovery. While, there is a highly statistically significant negative correlation between total score of functioning limitation and disabilities and total score of perceived social support. Also, there is a highly statistically significant negative correlation between the studied patients' total score of functioning limitation and disabilities and total score of recovery at ($p < 0.001$).

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Table (1) Distribution of the studied demographic characteristics (n=200). patients according to their socio-

Socio-demographic characteristics		No.	%
Age	18 - < 28 years	20	10.0
	28 - < 38 years	76	38.0
	38 - < 48 years	36	18.0
	48 - < 58 years	61	30.5
	58 - 65 years	7	3.5
	Mean ± SD	20.71 ± 1.21	
Sex	Male	114	57.0
	Female	86	43.0
Educational level	Illiterate	60	30.0
	Read and write	40	20.0
	Basic education	30	15.0
	Secondary education	60	30.0
	University education	10	5.0
Marital status	Single	110	55.0
	Married	30	15.0
	Widowed	40	20.0
	Divorced	20	10.0
Job	Work	10	5.0
	Not work	190	95.0
Residence	Rural	190	95.0
	Urban	10	5.0
Income level	Not enough	150	75.0
	Enough	50	25.0
Cohabitation	Alone	20	10.0
	with family	170	85.0
	With relatives	10	5.0

Table (2) Frequency distribution of the studied patients according to their clinical data (n=200).

Clinical data		No.	%
Type of schizophrenia	Paranoid schizophrenia	49	24.5
	Catatonic schizophrenia	29	14.5
	Disorganized schizophrenia	20	10.0
	Undifferentiated schizophrenia	10	5.0
	Residual schizophrenia	92	46.0
Age at the onset of the disease	15 - < 20 years	140	70.0
	25 - < 30 years	20	10.0
	30 - < 35 years	30	15.0
	From 35 and more years	10	5.0
Frequency of hospitalization	No times	128	64.0
	From 1 to 3 times	62	31.0
	From 4 to 6 times	10	5.0
Frequency of visits to outpatient clinics	Once a month	150	75.0
	Twice a month	50	25.0
Do you take psychiatric medications regularly?	Yes	111	55.5
	No	89	44.5
Is there family history of mental illness?	Yes	30	15.0
	No	170	85.0
If yes, what is mental illness? (n=30)	Schizophrenia	30	100.0
What is your relationship with this patient?(n=30)	Brother\ Sister	30	100.0

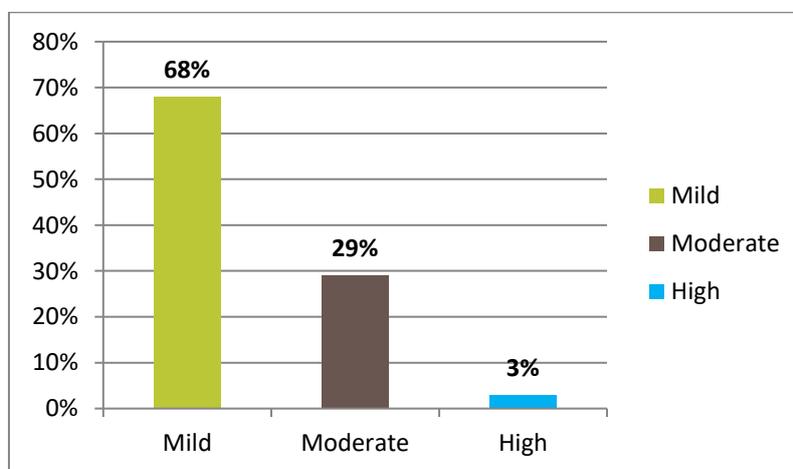


Figure (1) Percentage distribution of total level of perceived social support among the studied patients (n=200).

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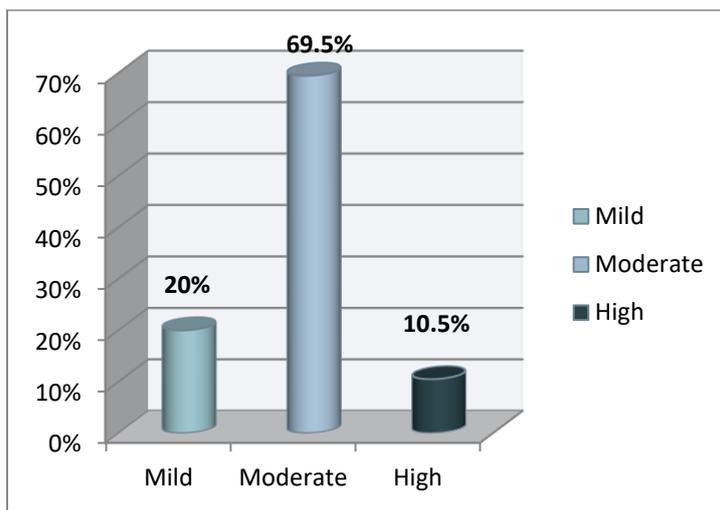


Figure (2) Percentage distribution of total level of recovery among the studied patients (n=200).

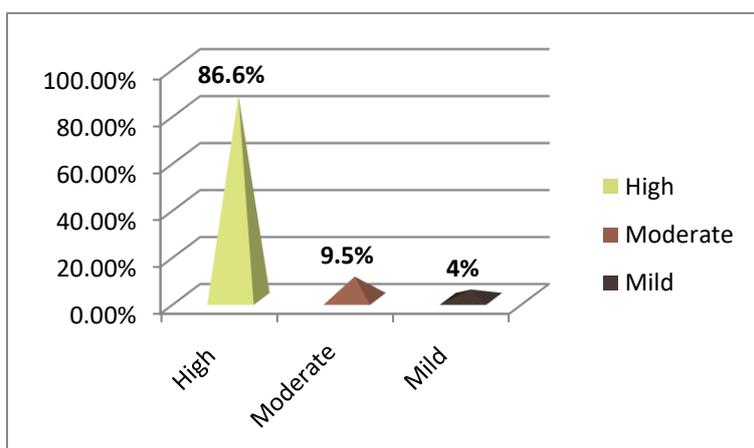


Figure (3): Percentage distribution of total level of functioning limitation and disabilities among the studied patients (N=200).

Table (3): Correlation between the studied patients' total scores of perceived social support, recovery and functioning limitation and disabilities (n=200).

Studied Variables	Total score of perceived social support		Total score of recovery		Total score of functioning limitation and disabilities	
	r	p	r	p	r	p
Total score of perceived social support	---	---	.594	.000**	-.587	.000**
Total score of recovery	.594	.000**	---	---	-.639	.000**
Total score of functioning limitation and disabilities	-.587	.000**	-.639	.000**	---	---

Discussion:

Regarding to the socio-demographic characteristics of the studied patients, the current study showed that, more than one third of the studied patients their age ranged between 28 <38 years. From the researcher point of view, most people with schizophrenia are diagnosed before the age of 40 years. This finding was similar with the study conducted by **Abd-Elhamid et al., (2022)** who reported that less than half of the studied patients their age ranging from 30 to less than 40 years. Conversely, this result was in disagreement with the study done by **Ragab et al., (2022)** who reported that approximately a third of the patients were between the ages of 20 and 29 years.

Regarding to patient's sex, more than half of patients were male. From the researcher point of view, this result may be due to that the fact about schizophrenia it is more common in males than females. This result was supported by the study carried out by **Elsayed et al., (2022)** who reported that, nearly three quarters of the studied schizophrenic patients were male. On the other hand, this result was in disagreement with the study performed by **Essam et al., (2022)** who reported that, nearly two thirds of the studied patients were females.

According to patients' educational level, less than one third of the studied patients were illiterate and other had secondary education. From the researcher point of view, this result may be due to that schizophrenia affect cognitive function negatively which including executive function, memory, attention, and abstract reasoning have been recognized as core feature of schizophrenia which consequently influence on educational level. This result was in disagreement with the study performed by **Filipic et al., (2020)** Who found that, less than half of the studied patients had secondary education and with the

study carried out by **Yttri et al., (2020)** who reported that, less than half of the studied patients were illiterate. Also, these findings were in disagreement with a study carried out by **Sánchez et al., (2020)** who stated that, the highest percentages of patients were university education.

Concerning to patient's marital status, more than half of them were single. From the researcher point of view, this result may be due to the schizophrenic patient may experience difficulties in social relationships that led to reduce opportunities for marriage where is a social process requiring certain social abilities for it to be successful. This finding was similar to the study done by **Mahmoud et al., (2021)** who reported that, less than two thirds of patients were single. On the other hand, this result was in disagreement with the study conducted by **Alam et al., (2022)** who reported that, about three quarters of patients were married.

Concerning to patient's job, the most of patients were not working. From the researcher point of view, this result may be due to schizophrenia is responsible for the profound dysfunction in all aspects of daily life and occupation and affect person's ability to work. Also, may be due to self-stigma associated with having a mental condition may negatively influence a person's opportunity to resume work. This result was in accordance with the study carried out by **Manea et al., (2020)** who found that, more than two thirds were unemployed. Conversely, this result was in disagreement with the study done by **Cates et al., (2021)** who stated that, the majority of them were working.

According to patient's residence, most of the studied patients were living in rural area. From the researcher point of view, this result may be due to the individuals live in such areas had low socioeconomic status as

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poverty where it is a risk factor of incidence of schizophrenia and such type of mental illness attributed to a demonic possession or magic which resulting in delaying in discovery of disease and delay in the beginning of treatment and poor prognosis in rural areas.. This result was in accordance with the study performed by **Luo et al., (2020)** who found that, more than half of the patients with schizophrenia were living in rural area. Conversely, this result was in disagreement with the study conducted by **Setiawati & Suaryan, (2020)** who found that, the majority of the patients with schizophrenia were living in urban area.

According to patient's income level, three quarters of the studied patients had not enough income. From the researcher point of view, this result may be due to the most of patients in the current study were unemployed. This result was congruent with the study performed by **Abdelgelil et al., (2022)** who reported that, the majority of the patients with schizophrenia had not enough income. Conversely, this result was in disagreement with the study conducted by **Essam et al., (2022)** who reported that, the majority of the patients with schizophrenia had fairly sufficient income.

Regarding to patient's cohabitation, majority of the studied patients were living with their family. From the researcher point of view, this may be due to most of the patients from rural area where people live in the family home (extended family). This result was in agreement with the study done by **Mohamed et al., (2021)** who reported that, more than two thirds of the studied patients were living with their family.

Regarding to clinical data of the studied patients, more than two fifths of the studied patients had residual type of schizophrenia. From the researcher point of view, this result

may be due to in people with residual schizophrenia, symptoms of schizophrenia still exist but are weaker than in other subtypes and that because three quarters of them visited outpatient clinics once a month. This result was in agreement with the study done by **Karaçar & Bademli, (2022)** who reported that, nearly half of the studied patients had residual type of schizophrenia. Conversely, this result was in disagreement with the study conducted by **Lök & Bademli, (2021)** who reported that, more than half of the studied patients had paranoid type of schizophrenia.

Also, regarding to age at the onset of the disease less than three quarters of them had $15 \leq 20$ years. From the researcher point of view, this result may be due to the nature of the illness in its prevalence between late adolescences and early adulthood. This finding was similar to the study done by **Dai et al., (2021)** who stated that, more than half of patients their age at the onset of disease were between $15 \leq 20$ years. Conversely, this result was in disagreement with the study by **Ali et al., (2022)** who reported that, more than half of the studied patients their age at the onset of disease were ≥ 30 years.

Furthermore, regarding to frequency of hospitalization nearly one third of them had from 1 to 3 times. From the researcher point of view, this result may be due to that schizophrenia is episodic and patients' ability to adjust with stressor is decreased and relapsed, which lead to re-hospitalization. This finding was in agreement with the study conducted by **Abdel-Rahman & Berma, (2019)** who stated that, about one third of the studied patients had 1 to 3 times of hospital admissions. On the other hand, this finding was in disagreement with the study carried out by **Abd-Elhamid et al., (2022)** who reported that, about two thirds of the studied

patients admitted to the hospital more than 3 times.

The result revealed also, three quarters of patients visited outpatient clinics once a month. From the researcher point of view, this result may be due to continuous follow up to outpatient is important for management of disease and relapse prevention. This result was in accordance with the study conducted by **Panov & Presyana, (2023)** who reported that, most of the studied patients visited outpatient clinics once a month.

The result of the study illustrated that, more than half of them take psychiatric medications regularly; most of patients had no family history with mental illness. Furthermore, all of studied patients who had family history of mental illness their family had schizophrenia and the ill relatives were their brother\ sister. From the researcher point of view, this result may be due to family support for patient to take their medication. Also, most of patients had no family history with mental illness may be due to the prevalence of schizophrenia is about 1 % among Egyptian people. In addition, all of studied patients who had family history of mental illness their family had schizophrenia and the ill relatives were their brother\ sister may be due to genetic factors.

This result was in accordance with the study conducted by **Atef et al., (2021)** who reported that, most of patients had no family history with mental illness and all of the studied patients who had family history of mental illness their family had schizophrenia and more than half of the ill relatives were their brother\ sister. On the other hand, this result was in disagreement with the study done by **Ali et al., (2022)** who reported that, more than one-third of patients had family history of a mental illness and two-thirds were father /mother had actual illness.

According to total level of perceived social support among the studied patients, the current study revealed that, more than two thirds of the studied patients had mild level of perceived social support, while less than one third of them had moderate level and minority of them had high level of social support. From the researcher point of view, this result may be due to stigma and discrimination, which have a direct effect on the social opportunities of people with schizophrenia. And may be due to people with schizophrenia have a little ability to perceive social support that given from others. This result was supported by the study done by **Mohamed et al., (2022)** who reported that, total level of perceived social support was low among patients of schizophrenia. While, This result was in disagreement with the study carried out by **Mekonnen et al., (2019)** who reported that, more than one fifth of patients had mild level of social support, while nearly three fifth of patients had moderate level of social support and about one fifth of patients had high level of social support.

According to total level of recovery among the studied patients, the current study indicated that, more than two thirds of them had moderate level of recovery. While, one fifth of the studied patients had mild level of recovery and less than one fifth of them had high level of recovery. From the researcher point of view, this result may be due to the patients' compliance with medications where more than half of the studied patients were compliant. Being compliant with medication regimen can provide the best outcomes for patients and increase the likelihood to achieve full recovery.

This result was in accordance with the study performed by **Abdo et al., (2022)** who reported that, about three quarters of the studied patients had moderate level of recovery, less than one fifth had low level and

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the minority had high level of recovery. Conversely, this result was in disagreement with the study carried out by **Abd Elghafar et al., (2022)** who reported that, the vast majority of patients had poor level of recovery in total score. Also, this result was in disagreement with the study done by **Mahmoud et al., (2021)** who conveyed that, most of the schizophrenic patients have a high level of functional recovery.

According to total level of functioning limitation and disabilities scale among the studied patients, the current study illustrated that, most of the studied patients had high level of total functioning limitation and disabilities. While, the minority of them had moderate and mild levels of total functioning limitation and disabilities. From the researcher point of view, this result may be due to schizophrenia remains one of the leading causes of disability including poor self-care, inability to manage tasks of daily living, social withdrawal, poor functioning in affinitive roles and work incapacity. This result was in disagreement with the study carried out by **Chen et al., (2019)** who reported that, the majority of the studied patients had moderate level of total functioning limitation and disabilities. While, the minority of them had high and mild levels of total functioning limitation and disabilities, respectively.

According to correlation between the studied patients' total scores of perceived social support, recovery and functioning limitation and disabilities scales, the current study illustrated that, there was a highly statistically significant positive correlation between the studied patients' total score of perceived social support and total score of recovery. From the researcher point of view, this result may be due to social recovery is a core component of holistic recovery in

schizophrenia. Social support from their families or their friends plays an important role in promoting patients compliance through encouraging optimism, self-esteem and control, buffering the stresses of being ill which in turn can decrease symptoms and hospitalization and increase level of recovery. This result was congruent with the study carried out by **Hamza et al., (2022)** who reported that, both perceived social support subscales and the total score had a statistically significant positive correlation with recovery. Also, this result was in agreement with the study conducted by **Skar-Froding et al., (2021)** who reported that, recovery was significantly associated with higher perceived social support.

The result of the present study revealed that, there was a highly statistically significant negative correlation between total score of functioning limitation and disabilities and total score of perceived social support. From the researcher point of view, this result may be due to support is one of the most essential protective factors against mental illness and help to decrease functioning limitation and disabilities. Also, social support from their families or their friends plays an important role in promoting patient compliance through encouraging optimism, self-esteem and control, buffering the stresses of being ill which in turn can decrease functioning limitation and disabilities. This result was in accordance with the study done by **Roth et al., (2021)** who reported that, there was a highly statistically significant negative correlation between total score of functioning limitation and disabilities and total score of perceived social support.

Also, there was a highly statistically significant negative correlation between the studied patients' total score of functioning limitation and disabilities and total score of

recovery. From the researcher point of view, this result may be due to functioning limitation and disabilities affect negatively on recovery of schizophrenia. Other causes may be due to patients in the first stage of recovery, where they are feeling helpless have higher levels of disabilities. Disability has been affected by characteristics like age of onset, duration of illness, severity and type of symptoms which significantly affect the recovery process in persons with schizophrenia. This shows that disability and recovery will be most often inter linked. This result was in agreement with the study performed by **Tandberg et al., (2021)** who reported that, there was a highly statistically significant negative correlation between the studied patients' total score of functioning limitation and disabilities and total score of recovery.

Conclusion:

There was a highly statistically significant positive correlation between the studied patients' total score of perceived social support and total score of recovery. While, there was a highly statistically significant negative correlation between total score of functioning limitation and disabilities and total score of perceived social support. Also, there was a highly statistically significant negative correlation between the studied patients' total score of functioning limitation and disabilities and total score of recovery.

Recommendations:

Recommendations for nursing education:

- ✓ Establish psych-educational programs for families and patients with schizophrenia to increase their understanding of the nature of illness and support of families for their patients.
- ✓ Continuous psycho-education is recommended for schizophrenic patients and their caregivers about medication compliance which help to reduce

psychiatric institutionalizations and improve recovery.

Recommendations for future nursing research:

- ✓ Future research should be undertaken to better understand recovery from schizophrenia, factors affecting recovery and strategies to promote recovery.
- ✓ Future research should be designed to identify and assess the relation between perceived social support and psychological recovery from schizophrenia.

Recommendations for nursing practice:

- ✓ Applying psycho-motivational training for patients with schizophrenia to improve their social skills, and emotional regulation skills and reduce negative symptoms.
- ✓ Mental health nurses should help schizophrenic patients develop and maintain hope for recovery from schizophrenia.

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العلاقة بين إدراك الدعم الاجتماعي ومستوى الأداء والتعافي بين مرضى الفصام

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يواجه مرضى الفصام صعوبة أكبر من بقية المجتمع في مجالات دعمهم الاجتماعي، وأنشطة الحياة اليومية، والأنشطة الترفيهية. يعتبر الدعم الاجتماعي للمرضى عاملاً حاسماً في تشخيص مرض انفصام الشخصية، لذلك هدفت هذه الدراسة إلي تقييم العلاقة بين ادراك الدعم الاجتماعي ومستوى الأداء والتعافي بين مرضى الفصام. و تم استخدام التصميم الوصفي الارتباطي في هذه الدراسة. وقد أجريت الدراسة بالعيادات الخارجية بمستشفى بنها للأمراض النفسية بمحافظة القليوبية التابعة للأمانة العامة للصحة النفسية بمصر. تم أخذ عينة عرضية تتكون من ٢٠٠ مريض مصاب بالفصام من المكان المذكور أعلاه. وقد اظهرت النتائج فيما يتعلق بالمستوى الإجمالي لإدراك الدعم الاجتماعي ٦٨٪ من المرضى الخاضعين للدراسة كان لديهم مستوى ضعيف من ادراك الدعم الاجتماعي، فيما يتعلق بالمستوى الإجمالي للتعافي ٦٩,٥٪ من المرضى الخاضعين للدراسة لديهم مستوى متوسط من التعافي، فيما يتعلق بالمستوى الإجمالي للتقييد في الأداء ومستوى الإعاقة ٨٦,٦٪ من المرضى الخاضعين للدراسة لديهم مستوى عال من القصور الوظيفي الكلي والإعاقات. كما أكدت نتائج الدراسة الحالية أن إدراك الدعم الاجتماعي يلعب دوراً مهماً في التعافي ومستوى القيود الوظيفية ومستوى الإعاقة بين مرضى الفصام. واوصت الدراسة بأنه يجب تطبيق التدريب التحفيزي النفسي للمرضى الذين يعانون من الفصام لتحسين ادراك الدعم الاجتماعي ومستوى الأداء والتعافي.