Impact of Social Support on Recovery Process among Patients Diagnosed with Schizophrenia

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Abstract

Background: Individuals diagnosed with schizophrenia are prone to experiencing greater challenges than their peers when it comes to their social networks, everyday tasks, and leisure pursuits. The prognosis of schizophrenia is thought to be significantly influenced by the social support system of the patient. **Aim:** The aim of this study was to evaluate the relationship between perceived social support and recovery among patients with schizophrenia. **Research Design:** This study used a descriptive correlational research design. **Setting:** The study was carried out at the psychiatric and mental health hospital's outpatient clinics in Benha City, Qalyubia governorate. **Subjects:** 200 schizophrenia patients with a purposeful sample were selected from the previously described setting. **Tools:** Three tools were employed to gather data: I) Sociodemographic and clinical data sheet was included in self-administered questionnaire. II) Perceived Social Support Scale with Multiple Dimensions. III) RAS (Recovery Assessment Scale). **Results:** The findings showed that mild levels of perceived social support were reported by (68%) of the patients in the study. Additionally, (69.5%) of the patients in the study recovered to a moderate degree. **Conclusion:** The study found that the patients' overall perceived social support score and overall recovery score showed a highly statistically significant positive correlation. **Recommendations:** Develop effective psychoeductional and motivational training programs to enhance Patients' social and emotional regulation abilities as well as lessen their depressive symptoms.
Key words: - Recovery, Schizophrenia, Social support

Introduction

With a lifetime prevalence of roughly 1% of the global population, schizophrenia is typically a severe mental illness and a leading contributor to the burden of disease worldwide *(McCutcheon et al., 2022).* The three domains of symptoms are as follows: (1) positive (such as hallucinations, delusions, paranoia, and thought disorder); (2) negative (such as anhedonia, avolition, social withdrawal, and thought poverty); and (3) cognitive (such as attention, working memory, and executive function dysfunction). Symptoms usually start in late adolescence or early adulthood *(Kaar et al., 2022).*

Schizophrenia patients frequently struggle in relationships, the workplace, the classroom, and society at large. They could appear to have lost contact with reality, feel scared, and withdraw. Although there is no cure for this incurable illness, it can be managed with the right care. This indicates that the individual struggles with rational thought, identifying reality, controlling emotions, coming to decisions, and interacting with others *(National Institute of Mental Health, 2022).*

People with schizophrenia experience difficulties with a variety of functions, including social interaction, communication, self-care, time management, and stress management. A person's functionality may decline as a result of these issues in a variety of domains. Decreased social support can be caused by a multitude of social and personal obstacles. These obstacles include stigma, diminished social roles, mental health symptoms that people encounter, and deficiencies in social skills. Examining these circumstances, which can expose people to subpar living conditions and other stigmatizations occasionally, reveals that the ideas of social support and self-sufficiency are beneficial in terms of functionality *(Ata et al., 2022).*

In addition, inadequate affection and support from the surroundings has a detrimental impact on social support levels, leading to internalized stigmatization, a sense of social rejection, difficulties adjusting to life, and a diversion from the pursuit of meaning. One of the most important factors affecting recovery is social support. A common belief that people develop at different times in their lives—that they are respected, cared for, and that those from whom they will receive assistance when necessary are content with the relationships they have—is known as perceived social support *(Kokeren & Demir, 2022).*

Individuals diagnosed with schizophrenia are prone to experiencing greater challenges than

their peers when it comes to their social networks, everyday tasks, and leisure pursuits. Social support from peers is thought to play a major role in a patient's prognosis for schizophrenia *(Vaingankar et al., 2019)*.

Numerous beneficial effects of high levels of perceived social support on mortality and morbidity, functioning level, and/or treatment adherence or recovery among individuals with schizophrenia have been shown by an increasing body of research *(Norman et al., 2021)*. However, a lack of perceived social support can have a number of negative effects, including influencing the onset and progression of schizophrenia, exacerbating symptoms of the disorder, impairing recovery and personal and social functioning, increasing the risk of relapse, becoming dependent, decreasing activity and productivity, deteriorating relationships, and negatively affecting quality of life *(Mekonnen et al., 2019)*.

Significance of the study

Approximately 24 million people or 1 in 300 people (0.32%), worldwide suffer from schizophrenia. Among adults, this rate is 1 in 222 (0.45%). Schizophrenia is diagnosed in 0.3% to 0.7% of individuals during their lifetime. An estimated 1.1 million new cases were reported in 2017, and there were 20 million cases worldwide in 2019 *(Institute of Health Metrics and Evaluation (IHME), 2021; James & Abate, 2018)*.

People with schizophrenia were thought to have a chronic, degenerative illness with little chance of recovery. In the past, Just 2.6% of people with schizophrenia were able to fully or permanently recover, and 13% only made a temporary recovery. Globally, the recovery has significantly altered the mental health system and is now a national mental health policy in the majority of developed nations *(Jacob, 2021)*.

Aim of the study

The aim of this study was to evaluate the relationship between perceived social support and recovery among patients with schizophrenia.

Research Questions

1. What are the levels of perceived social support and recovery among patients diagnosed with schizophrenia?
2. Is there relationship between perceived social support and recovery among patients with schizophrenia?

Subjects and Method

The following four designs will represent the study's subjects and method:

I-Technical design:

Research Design:

This study used a descriptive correlational research design.

Research Setting

The General Secretariat of Mental Health in Egypt's Benha City, Qalyubia Governorate, is home to the psychiatric and mental health hospital's outpatient clinics, where this study was carried out. It consists of two buildings: One houses six departments (four male, one female, and one outpatient clinic), and the other houses one addiction department with two hundred and ninety-nine beds. The ground floor outpatient clinic, which is open daily. This hospital accepts new patients for treatment, follows up with patients after they are discharged, and treats patients with acute and chronic mental illnesses who require institutional care.

Research Subject

Sample size:

Sample size determined using Slovin's formula for sample size calculation *(Rayan, 2013)*.

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

n=sample size
N=population size is 400
e=margin of error

Subjects

A Purposive sample consists of 200 patients with schizophrenia were selected purposively using the following criteria: they had to be of both sexes, between the ages of 18 and 65, free from other psychiatric disorders, able to communicate, and willing to take part in the study.

Tools for data collection

The following tools were used to collect data:

Tool (1): Self-Administered Questionnaire:

The questionnaire, which had two parts, was created by researchers in an Arabic language using scientific literature reviews as a basis:

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)* in an English language and translated by researcher into an Arabic language. The scale designed to determine how much social support the patients feel they are receiving. There were twelve items in all. A three-point Likert scale was used to rate it, with the options being "agree = 3, neutral = 2, disagree = 1". The scale is divided into three subscales: support from family, friends and significant others, each with four items: items 3, 4, 8 & 11; items 6, 7, 9 & 12; and items 1, 2, 5 & 10 to determine support from friends and family.

Scoring system

The subscales yielded the lowest and highest scores, 4 and 12, respectively. The range of the total score is 12 to 36. Evidently, the perceived level of social support increases with score points. 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)* in an English language and translated by researcher into an Arabic language. The RAS comprises 24 items to evaluate the degree of recovery in mental health patients. The same 5-point Likert scale, with 1 denoting "strongly disagree" and 5 denoting "strongly agree," is used to rate each item. 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:

The range of the total score is 24 to 120. It goes without saying that a higher score indicates a larger recovery.

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

II-Operational design:

The current study was carried out with a pilot study, fieldwork, validity and reliability of the tools, and a preparatory phase.

Preparatory phase:

To obtain the knowledge required to conduct this study and to prepare the necessary tools for data collection, a thorough review of the body of literature relevant to the research area was conducted. This included electronic dissertations, books, articles, research, and periodicals.

Validity of the tools

A jury comprised of five experts in psychiatric and mental health nursing evaluated the tools to ensure that the items were appropriate and that the questions were clear, comprehensive, and applicable. Their opinions were taken into consideration when making modifications and developing the final form. A few changes were made to the tool (2) A seven-point Likert scale, from "very strongly agree = (7) to very strongly disagree = (1)," was replaced with a three-point Likert scale, from "agree = (3), neutral = (2), and disagree = (1)," in the scoring system for the multidimensional perceived social support scale.

Reliability of the tools

By giving the identical tool to the same subject in a comparable setting, Cronbach's Alpha was used to assess the study tools internal consistency. 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.

Pilot study

To evaluate the tools' usability, dependability, and clarity, a pilot study was carried out. In order to do that, 10% (20) of the patients were tested for the study. Based on the results of the data analysis, this sample was added to the actual study sample.

Result of pilot study:

Following the pilot study, it was discovered that:

1. There were no alterations made, and the instruments were understandable and useful.
2. The tools were appropriate and useful.
3. No issue that could impede the data collection process was found.
4. After this pilot study, the instruments were prepared for use.

Actual study (Field work)

1- The patients who fulfilled the inclusion requirements and consented to be part of the study were introduced to the researcher.
2- The patients were given a brief explanation of the study's goal before any data was gathered.
3- After outlining the goal, oral consent was obtained.
4- In the waiting area of the outpatient clinic, every patient was interviewed and evaluated separately.
5- The researcher watched as each patient completed the questionnaire and filled it out.

The researcher assists patients who struggle with reading by recording their responses.

6- It took an average of forty minutes to complete the study tools; the sociodemographic and clinical data took ten minutes to complete, the Multidimensional Perceived Social Support Scale (MSPSS) took fifteen minutes to complete, and the Recovery Assessment Scale (RAS) took fifteen minutes to complete.

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.

III-Administrative design
Administrative approval
The dean of Benha University's nursing faculty sent a formal letter requesting permission to collect data from the general secretariat of mental health in Egypt and the director of the psychiatric mental hospital in Benha City, Qalyubia governorate, in order to carry out the proposed study. After the study protocol and tools were revised, official approval was obtained from the human rights protection committee and the research committee of the general secretariat of mental health in Egypt. Subsequently, the director of the psychiatric mental health hospital also provided official approval. The administrative staff was briefed on the purpose and design of the study.

Ethical considerations
Approval was obtained from the Ethical Committee of the Faculty of Nursing, Benha University. The patients were informed of the study's purpose by the researcher, and they received guarantees regarding confidentiality and anonymity. The study participants were informed that they could opt out at any time and that they could choose not to participate, after the patients' consent was obtained. The design of the study has no adverse effects on the patients who are being studied.

IV-Statistical design
After data collection was finished, the information was tabulated, arranged, and statistically analyzed using the Statistical Package of Social Science (SPSS) version 22 on an IBM personal computer. Descriptive statistics were used to present the data as numbers and percentages, means, standard deviations, and the Chi-Square test was used to compare the qualitative variables. The degree of significance was determined by using the person correlation coefficient (r) for correlation analysis on quantitative data:

Results

- When there is a strong statistical significance. P-value = 0.001.
- When P-value < 0.05, a statistically significant difference was taken into account.
- If P-value was greater than 0.05, the difference was deemed non-significant..

Results
Table (1) shows that the majority of the patients under study were male (57%) and their mean age ranged from 20.71 ± 1.21 years, with over one third (38%) being between the ages of 28 and less than 38. Also, less than one third (30%, 30%) of them had spilling and secondary education, respectively. As well as, over than half (55%) of them are single, the most of them (95%, 95%) aren't working and are living in rural area, respectively. Also, three quarters of them (75.0%) haven't enough income and majority of them (85%) is 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 of them (70%) have 15 - < 20 years at the onset of the disease, nearly one third of them (31%) 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 with family history of mental illness their family have schizophrenia and the ill relatives are brother\ sister, respectively.

Figure (1) indicates that, of the patients studied, more than two thirds (68%) had mild levels of perceived social support, compared to less than one third (29%) who had moderate levels and a small percentage (3%) who had high levels.

Figure (2) indicates that a moderate degree of recovery has been reached by more than two thirds (69.5%) of the patients under study. While less than one fifth (10.5%) of them have a high level of recovery, one fifth (20%) of them have a mild level.

Table (3) indicates that the total score of recovery and the studied patients' perceived social support have a highly statistically significant positive correlation. Indicates that a moderate degree of recovery has been reached by more than two thirds (69.5%) of the patients under study. While less than one fifth (10.5%) of them have a high level of recovery, one fifth (20%) of them have a mild level..

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

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
Working status	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 level of perceived social support among the studied patients (n=200).
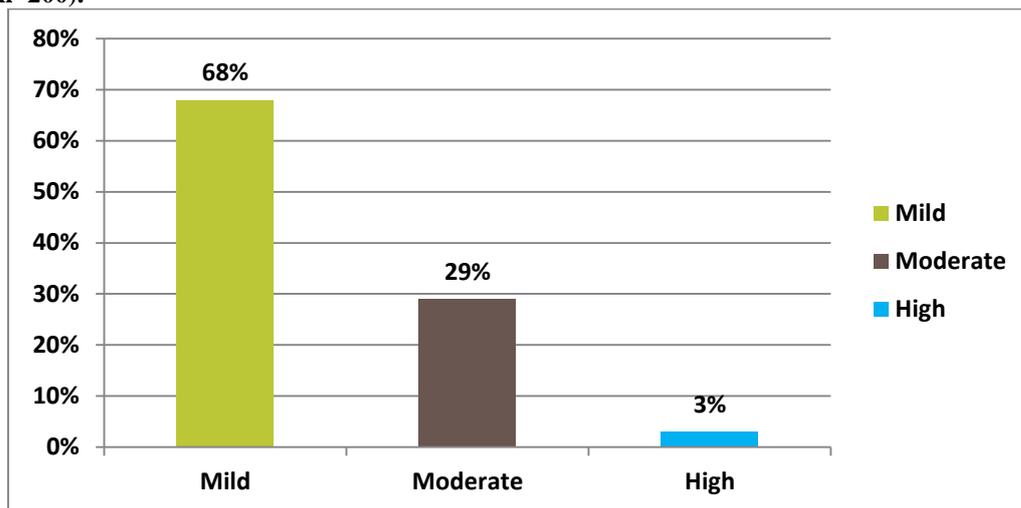

Figure (2) Percentage distribution of level of recovery among the studied patients (n=200).
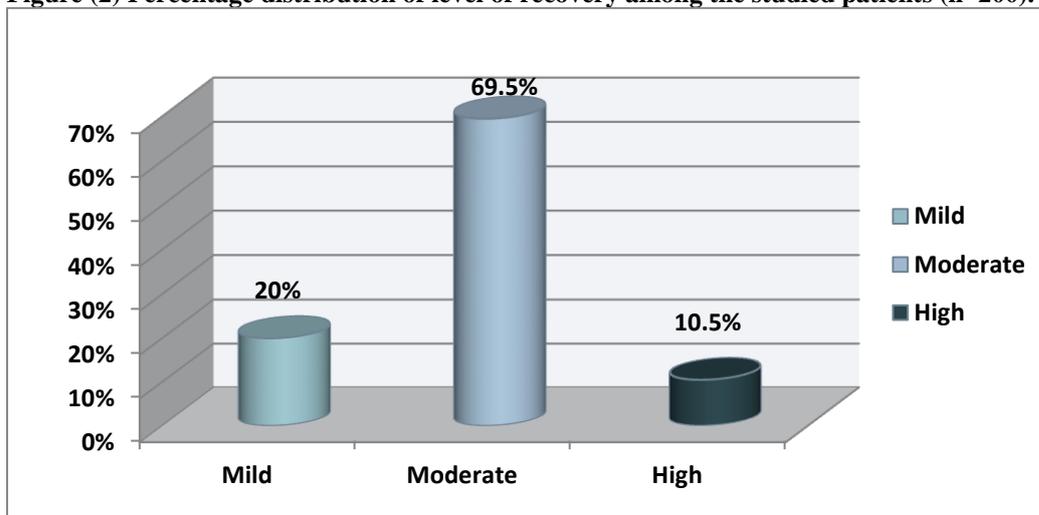

Table (3): Correlation matrix of patients diagnosed with schizophrenia in relation to the studied variables (n= 200)

Studied Variables	Score of perceived social support		Score of recovery	
	r	p	r	p
Score of perceived social support	---	---	.594	.000**
Score of recovery	.594	.000**	---	---

Discussion

One of the most complicated mental illnesses, schizophrenia ranks eighth in terms of patient disability. The patients have significant impairments in their social and occupational functioning. Social support is the feeling or experience that someone is valued and loved by others, a part of a social group with reciprocal responsibilities and assistance, and respected and esteemed. The goal of schizophrenia recovery is to enable individuals to live fulfilling lives in spite of the obstacles posed by their mental illness. It is a continuous,

individual process. People with schizophrenia experience severe impairments in their ability to function in social and professional contexts *(Mohamed et al., 2022).*

Thus, the purpose of this study was to evaluate the relationship between perceived social support and recovery among patients with schizophrenia.

With respect to the sociodemographic features of the patients under investigation, the present study revealed that over one-third of the patients fell within the age range of 28 to 38 years. It could be rationalized that, 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 revealed that less than half of the patients under study were between the ages of 30 and under 40. Conversely, this result was in disagreement with the study done by **Ragab et al., (2022)** who stated that roughly one-third of the patients were in the 20–29 age range.

More than half of the patients were male in terms of sex. According to the researcher, this finding might be explained by the fact that schizophrenia affects men more frequently than women. This result was supported by the study carried out by **Elsayed et al., (2022)** who stated that almost 75% of the schizophrenic patients in their study were men. On the other hand, this result was in disagreement with the study performed by **Essam et al., (2022)** who stated that women made up almost two thirds of the patients in the study.

According to patient's level of education, of the patients under study, less than one-third were illiterate, while others had only completed secondary school. According to the researcher, this outcome might be caused by the detrimental effects of schizophrenia on cognitive function, which include executive function, memory, attention, and abstract reasoning. These effects have been identified as core features of schizophrenia, and they subsequently have an impact on educational attainment. This result was in disagreement with the study performed by **Filipcic et al., (2020)** Who found that, fewer than half of the patients in the study 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 results disagreed with research conducted by **Sánchez et al., (2020)** who stated that, the highest percentages of patients were university education.

Regarding the marital status of the patients, over half of them were unmarried. According to the researcher, this outcome might be because the schizophrenic patient had trouble forming social bonds, which decreased their chances of getting married—a social process that requires certain social skills to be successful. This result was in line with a study conducted by **Mahmoud et al., (2021)** which found that less than two thirds of patients were single. However, this finding contradicted the findings of a study by **Alam et al., (2022)** who found that roughly three quarters of patients were married.

In terms of the patients' working status, the majority of them were not working. According to the researcher, this outcome might be the result of schizophrenia, which causes severe dysfunction in all facets of daily life and employment and impairs a person's capacity for work. Additionally, the stigma attached to having a mental illness may have a detrimental effect on a person's ability to return to the workforce. This outcome was consistent with the research conducted by **Manea et al., (2020)** who discovered that over two thirds did not have a job. On the other hand, this result disagreed with the research conducted by **Cates et al., (2021)** who claimed that most of them were employed.

The majority of the patients under study lived in rural areas, based on their place of residence. According to the researcher, this outcome might be because people who live in these areas have low socioeconomic status, which is linked to an increased risk of schizophrenia and other mental illnesses that are attributed to demonic possession or magic. This would explain why the diagnosis of the illness is delayed, treatment is started later, and the prognosis is worse in rural areas. This outcome was consistent with the research conducted by **Luo et al., (2020)** who discovered that over half of schizophrenia patients lived in rural areas. On the other hand, this result disagreed with the research done by **Setiawati & Suaryan, (2020)** who discovered that most schizophrenia patients lived in metropolitan areas.

Based on the patients' income bracket, three quarters of the patients in the study did not make enough money. According to the researcher, this outcome might be because the majority of the patients in the current study had no job. This outcome aligned with the research conducted by **Abdelgelil et al., (2022)** who stated that the bulk of schizophrenia patients lacked sufficient income. On the other hand, this result disagreed with the research done by **Essam et al., (2022)** who stated that most schizophrenia patients had incomes that were reasonably adequate.

In terms of cohabitation, the majority of the patients in the study did so with their family. According to the researcher, this might be because the majority of patients are from rural areas where families (or extended families) reside. This outcome was consistent with the research conducted by **Mohamed et al., (2021)** who stated that over two thirds of the patients in the study lived with their families.

More than two fifths of the patients in the study had residual forms of schizophrenia, according to their clinical data. According to the researcher, this outcome could be caused by 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 conducted 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, over than half of the studied patients had paranoid type of schizophrenia.

Furthermore, of those who had the disease at onset, less than 75% had an age of $15 \leq 20$ years. The researcher believes that this outcome could be attributed to the nature of the illness, which is more common in late adolescence and early adulthood. This result was consistent with research conducted by **Dai et al., (2021)** who reported that more than half of the patients were between the ages of 15 and 20 when the disease first started. On the other hand, this result disagreed with the research by **Ali et al., (2022)** who stated that the majority of the patients in the study had ages of ≥ 30 when the disease first started. Furthermore, regarding to frequency of hospitalization nearly one third of them had from 1 to 3 times. According to the researcher, this outcome might be caused by the episodic nature of schizophrenia, which makes it harder for patients to cope with stress and cause relapses that require hospitalization. This finding was in agreement with the study conducted by **Abdel-Rahman & Berma, (2019)** who reported that one-third of the patients in the study had been admitted to the hospital one to three times. However, this result disagreed with the investigation conducted 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, most of the patients in this study visited outpatient clinics once a month.

The result of the study illustrated that, over 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 because of 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 **Atef et al., (2021)** who reported that, All of the patients who were studied had no family history of mental illness, and all of those patients their family had schizophrenia and more than half of the ill relatives were their brother\ sister. However, this outcome disagreed with the research conducted by **Ali et al., (2022)** who stated that two thirds of patients were parents who were actually ill and that over one-third of patients had a family history of mental illness.

Based on the overall perceived social support level of the patients under investigation, the current study found that over two thirds of the patients had mild perceived social support, less than one third had moderate perceived social support, and a minority had high perceived social support. According to the researcher, stigma and discrimination may have contributed to this outcome since they directly affect the social opportunities available to individuals who have 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 conducted by **Mohamed et al., (2022)** who reported that, Schizophrenia patients had a low overall perception of social support. However, this outcome conflicted with the research conducted by **Mekonnen et al., (2019)** who stated that over 25% of patient had low social support, 35% had moderate social support, and 25% had high social support.

Based on the overall recovery status of the patients under investigation, the current study found that over two thirds of them had a moderate level of recovery. Less than one fifth of the patients in the study had a high degree of recovery, while one fifth of the patients had a mild level of recovery. According to the researcher, the reason for this outcome could be that over half of the patients in the study were compliant with their medication regimens. Following a prescribed drug schedule can help patients get the best results and have a higher chance of making a full recovery.

This result was in accordance with the study performed by **Abdo et al., (2022)** who reported that, about three quarters of the patients in the study had low recovery, roughly three quarters had moderate recovery, and the remaining patients had high recovery. On the other hand, this result disagreed with the research conducted by **Abd Elghafar et al., (2022)** who stated that, when looking at the whole score,

the great majority of patients had a poor degree of recovery. Furthermore, this outcome did not agree with the research conducted by **Mahmoud et al., (2021)** who conveyed that, most of the schizophrenic patients have a high level of functional recovery.

The current study demonstrated that there was a highly statistically significant positive correlation between the studied patients' total perceived social support score and their total recovery score, based on the correlation between the scales measuring perceived social support and recovery. According to the researcher, social recovery is a crucial part of holistic recovery from schizophrenia, which could account for this outcome. Social support from friends and family can help patients comply with treatment by fostering optimism, self-worth, and self-control. This can help patients cope with the stress of illness and reduce symptoms and hospital stays while also improving the rate of recovery. This outcome was consistent with the research conducted by **Hamza et al., (2022)** who found a statistically significant positive correlation between the total score and the subscales measuring perceived social support and recovery. Furthermore, this outcome was consistent with the research carried out by **Skar-Froding et al., (2021)** who reported that, recovery was significantly associated with higher perceived social support.

Conclusion
Drawing from the earlier findings of this study, it was determined that:
The results showed that mild levels of perceived social support were reported by more than two thirds of the patients in the study. A moderate degree of recovery was attained by over two thirds of the patients in the study. Additionally, the overall perceived social support score and the overall recovery score of the patients under study showed a highly statistically significant positive correlation.

Recommendations
The present study's conclusion and its prior findings led to the following suggestions being made:
1. **Recommendations for nursing education**
✓ There is a necessity of raising awareness among patients and their family members about the essential role of social support and its impact on recovery
✓ Develop effective psycho-education programs, as this can lessen the need for psychiatric institutionalization and enhance recovery.
2. **Recommendations for future nursing research**

✓ Subsequent investigations ought to be conducted to gain a deeper comprehension of schizophrenia recovery, variables impacting recovery, and tactics to encourage recovery.
✓ It is important to plan future research to determine and evaluate the relationship between psychological recovery from schizophrenia and perceived social support.
3. **Recommendations for nursing practice**
✓ Develop psycho-motivational training is used to lessen negative symptoms and help patients with schizophrenia become more socially and emotionally stable.
✓ Mental health nurses ought to assist individuals with schizophrenia in cultivating and sustaining hope for their recovery from the disorder. which is essential to the development of the schizophrenia recovery process.

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