Insight and Its Relation with Demographic and Clinical Characteristics Among patients with Schizophrenia

Nesma Ashraf Esmail Ali [(1)], Huda Said Ibrahim Mohamed [(2)], Shadia Fathy Mahmoud Mohamed [(3)]

[(1)] Clinical instructor at Technical institute of nursing, Zagazig University, Egypt. [(2)] Lecturer of Psychiatric and Mental Health Nursing, Faculty of Nursing, Zagazig University, Egypt. [(3)] Assistant Professor of Psychiatric and Mental Health Nursing, Faculty of Nursing, Zagazig University, Egypt.
Corresponding Author: Nesma Ashraf Esmail Ali
Mail: nesmaashraf28@gmail.com

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Abstract

Background: Background: Schizophrenia significantly influences an individual's insight and overall well-being, often leading to a complex interplay between symptoms and perceived quality of life. Demographic and clinical characteristics of schizophrenic patients also affect patient's insight. **Aim of the study:** To assess the relationship between insight and both demographic and clinical characteristics among patients with schizophrenia. **Subjects and Methods: Research design:** Cross-sectional descriptive research design was **Setting:** The study was conducted at psychiatric inpatient wards at EL-Azazy Hospital for Mental Health, Sharkia Governorate, Abo-Hammad City., Egypt. **Subjects:** A purposive sample of 140 schizophrenic patients. **Tools of data collection:** Two tools were used, including Structured Interview Questionnaire**,** which composed of demographic and clinical data and The Birchwood Insight Scale **(BIS)**. **Results:** The study findings demonstrated that slightly more than half of studied patients had no insight. Also, there was highly statistically significant relation between patients' insight and their age and educational level and duration of disease. Additionally, there was statistically significant relation between patients' insight and their marital status ,age at onset of disease ,frequency of hospitalization and frequency of visits to outpatients clinics . **Conclusion**: The Study results proven that slightly more than half of schizophrenic patients had no insight. More decrease in insight among patients occurs when being single, not working, aged between twenty and less than forty and with longer disease duration. **Recommendations:** The present study recommends to develop psycho educational program for enhancing clinical insight in schizophrenic patients because of its significance in treatment process..

Keywords: *Demographic, clinical characteristics, Insight, Patients, Schizophrenia.*

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). Schizophrenia is a serious and persistent psychiatric disorder that has an impact on the person's ability to think logically, act rationally, express their feelings, as well as interact with others (Shanko et al., 2023). Symptoms of schizophrenia include positive symptoms, negative symptoms and impaired cognitive function (Merikangas et al., 2022).

Impaired insight is a prevalent hallmark of schizophrenia, with 50–80% of patients thinking they are not mentally ill. Considering that insight impairment is linked to worse clinical outcomes, increased symptom severity, and inadequate treatment adherence, it is clinically significant (Phahladira et al., 2019).

Studies on insight into schizophrenia have increased in recent years, and researchers have evaluated the concept of insight as a continuous and multidimensional phenomenon, including awareness of the illness, its symptoms and accurate symptom attribution, the need for treatment, and the consequences of treatment(Gundogmus et al .,2023).

Insight is a multidimensional concept that includes awareness of illness, the capacity to re-label psychotic experiences as abnormal, and adherence to treatment, which vary along a continuum ,Poor insight is a feature of schizophrenia across different cultures and across all stages of the illness, and it persists even after symptoms have remitted ,From a treating clinician's perspective, impaired insight is one of the most vexing aspects of the illness because of the challenges it poses for therapeutic engagement and medication adherence(Lysaker et al .,2022)

Influence of gender and socio-demographic variables on different dimensions of insight such as awareness and attributions of insight among the persons with schizophrenia has been studied earlier. Women reported poor awareness on thought disorder and alogia and a higher misattribution of apathy. The married women had been reported the deficit of insight dimensions such as awareness of early-stage illness, cognitive and positive symptoms. Among men, symptoms of dysfunction, higher age, other psychosis diagnosis and higher scores in positive and recitative symptoms explained deficits of insight dimensions. (Hélène et al ., 2014).

Insight is a dynamic phenomenon. Insight was predicted by the socio-demographic variables such as years of education. There was a relation between years of education and insight. Among the patients with higher levels of education reported having good insight. Insight in the first episode gradually improved during early adulthood and eventually during the later life it declined gradually,The interpersonal factors associated with insight in schizophrenia. All associations were independent of personal factors such as age, gender, age at first hospitalization functioning and symptoms. Insight was negatively correlated with neurocognitive deficits and symptoms of severity in chronic schizophrenia.)Rao, Antony & Joseph, (2020).

Significance of this study:

Schizophrenia is one of the leading cause of disability worldwide. By the end of 2019 the number of schizophrenic patient in Egypt is estimated to be about (1 million) people (Ramy, 2019). Insight deficits are believed to be associated with worse medication compliance, involuntary hospitalization, worse course of illness, worse treatment outcome, worse prognosis, worse level of work quality, greater frequency and severity of relapse and worse quality of psychosocial functioning (Manea, Zaki and Morsi, 2020). Studies found Insight is independent of many clinical and demographic variables, such as gender, age and age at illness onset (Pousa et al.,2017)Therefore, the present study will be conducted to assess the influence of demographic and clinical backgrounds on insight among patients with schizophrenia.

Aim of the study:

The aim of the study was to assess the relationship between insight and both demographic and clinical characteristics among patients with schizophrenia.

Research Questions:

- What are the levels of insight among patients with schizophrenia?
- Is there a relation between insight in patients with schizophrenia and their demographic and clinical characters?

Subjects and Methods:

Research design:

A descriptive cross-sectional design was used to conduct this study.

Study setting:

Setting:

The existing study was conducted at EL- Azazy hospital for Mental Health in Abo-Hammad City, Alsharkia governorate, specifically, inpatient psychiatric wards for patients with schizophrenia., which is affiliated to the General Secretariat of Mental Health in Egypt.

Study Subjects:

A purposive sample of 140 psychiatric patients with schizophrenia was randomly selected from the above-mentioned setting based on the following inclusion criteria;

- Both male and female patients aged from18 to 60 years old
- All educational levels.
- Free from medical or neurobiological condition that would interfere with the patient's ability to communicate.

Tools of data collection:

Two tools were utilized to gather the required data:

Tool I: Structured Interview questionnaire: - consisted of two parts:

Part (I): Demographic data: To elicit data about patients characteristics such as (age, sex, occupation, educational level and marital status).

Part (II): Clinical data: which includes (family history of disease, Onset of disease, total disease duration, frequency of hospitalization & frequency of visits to out patient clinics).

Tool II: The Birchwood Insight Scale (BIS):

Birchwood et al., (1994), developed it to measure level of insight in patients with psychosis. It consists of 8 items with three subscales: awareness of illness (2 items), re label of symptoms (2 items), and need for treatment (4 items) .

Scoring system:

Scores of scale on a three-point Likert scale where 0= disagree, 1= unsure and 2= agree, the total score ranged from 0 to 12 points. maximum score = 12 very good insight, minimum score = 0 no insight(9 and above = good insight) indicate adequate awareness of mental illness, The reliability of this scale was 0.75.

Content Validity and Reliability:

In order to verify their original validity, Tools were translated into Arabic, utilizing translation and back translation techniques to ensure their original validity. Content validity was checked before the pilot study and the actual data collection. The tools were revised by three-person panels of experts through the distribution of the two tools with a covering letter and explanation sheet that explained the purpose of the study. three –person panels of experts, three assistant professor from the department of psychiatric and mental health nursing at zagazig University. They revised the tools for clarity, relevance, applicability, comprehensiveness, and recommendations were taken into consideration. The Cronbach's alpha test was used to evaluate the tools' reliability. They exhibit a high level of reliability.

Field work:

Following the receipt of the necessary approval to carry out this study, the researcher met with the hospital's manager and head nurses to obtain their consent, and get their cooperation to start gathering data. After that, the researcher conducted interviews with the selected patients, gave a brief introduction, and explained the goals of the study. Then she got the selected patients' written consent to take part in the study.

Prior to beginning data collection, the researcher established a trusting relationship with the selected sample. The researcher conducted one-on-one interviews with each patient, carefully explaining each question on the data collection forms to him before selecting the response that best fit his needs. In order to get their participation in completing out the study's instruments, a thorough explanation was provided.

Patients took approximately 30-40 minutes for answering the questions, depending on the patient's level of understanding and ability to answer each question. The researcher went to EL-Azazy Hospital for Mental Health in Abo-Hammad City, Alsharkia Governorate, in the inpatient psychiatric wards for patients with schizophrenia.twice a week, from 9 a.m. to 1 p.m., to collect data. The assessment phase was executed in three months, starting in early Augest 2024, and was completed by early November 2024.

Pilot study:

A pilot study was conducted on a sample of 14 patients with schizophrenia, approximately 10% of the calculated total sample size. The aim was to test the clarity and feasibility of the tools, the comprehension of items, and to estimate the exact time required for filling out the data collection forms. According to the pilot study results, the time needed to fill out the tools was about 30-40 minutes. The patients who

participated in the pilot study were included in the study sample, as no modification was needed in the data collection form.

Administration and Ethical consideration:

First, the study proposal was accepted by the Zagazig University Faculty of Nursing's Post Graduate Committee and Research Ethics Committee (REC) with the code of M.DZU.NUR/228/10/6/2024. Before starting any step in the study, an official permission to conduct this study was obtained by submitting an official letter issued by the Dean of the Faculty of Nursing at Zagazig University to the director of the General Secretariat of Mental Health and Addiction Treatment in Cairo City. Accordingly, approvals to conduct the study were obtained from the director of the General Secretariat of Mental Health and Addiction Treatment following the application of all required procedures and documentation, which took about one month. Then, approvals were obtained from the hospital director and the nursing director of EL-Azazy Hospital for Mental Health. patients' voluntary participation was confirmed. Clear instructions on how to complete the scales were given. The research instruments used in the study did not cause any harm, distress, or raise any religious or cultural concerns among the sampled patients.

A written consent for participation in the study was obtained from the patients after fully explaining the aim of the study. The studied patients were given the opportunity to refuse participation and were notified that they could withdraw at any stage of filling out the tools. Also, the studied patients were assured that the information would be confidential and used only for research purposes. Additionally, the confidentiality and anonymity of the participants were assured through the coding of all data.

Statistical analysis:

The gathered data was arranged, tabulated, and subjected to statistical analysis using IBM-compatible PCs running SPSS version 25 for Windows. The mean, standard deviation, frequency, and percentages were among the descriptive statistics that were employed. To compare qualitative variables and ascertain if two variables were related, the chi-square (X) 2 test and P-value were employed. The correlation coefficient test (r) was used to look into the relationship between the variables under study. Multiple linear regression was used to get the expected values of the variables being studied. Cronbach's Alpha was employed to assess the dependability of the research instruments. $P < 0.05$ was considered a significant level value, and $p < 0.01$ was considered a highly significant level value. No statistically significant difference was considered when $p \geq 0.05$.

Results:

Table (1) shows that 40.0% of the studied patients were age less than 30 years with a mean scores of 36.24±7.67 and range from 19-58 years old and 66.4% of them were male. Also, 40.7% of them had moderate education and 35.0% of them were single. While, 47.9% of them were not working and 72.9% of them lived in rural area. In addition to, 61.4% of them were living with family.

Table (2) reveals that 60% of the studied Patients' ages at onset of disease varied from 20 < 40 years. Moreover, diseases duration ranged from 5 < 10 years for 50.7% of the studied patients. Also, (59.3%) of them had more than 3 times of hospitalization. While, 67.9%. Of them weren't taking psychiatric medications regularly. As well as only 33.6% of them had a family history of mental illnes . Meanwhile, 44.7% of these family members had schizophrenia and 31.9% of the ill relatives were fathers or mothers.

Figure (1) illustrates that; 55.0% of the studied patients had no insight. While, 45.0% of them had good insight.

Table (3) displayed that, there was highly statistically significant relation between total insight of the studied patients and their demographic data as age and educational level (p=0.000). While, there was statistically significant relation between total insight of the studied patients and their marital status (p=0.042) and cohabitation (P=0.047).

Table (4) shows that, there was highly statistically significant relation between total patients' insight and their clinical data as age at onset of the disease (p=0.002) and their duration of disease (p=0.000). Also, there was statistically significant relation between frequency of hospitalization (P= 0.031) and Frequency

of visits to outpatient clinics (P= 0.059). While, there was no statistically significant relation with their Family history of disease (P > 0.05).

Table (5): displays that age at onset of the disease, duration of the disease and frequency of hospitalization were statistically significant negative predictor for the insight score .While, the patients' educational level was a statistically positive predictor for the insight score.

Table (1): Socio-Demographic characteristics of patients in the study sample (n=140).

Socio -demographic characteristics	No.	%
Age/years		
< 30 years	56	40.0
≥ 30 and < 40 years	25	17.9
≥ 40 and < 50 years	53	37.9
≥ 50 years	6	4.3
Min - Max	19 - 58	
Mean ±SD	36.24±7.67	
Sex:		
Male	93	66.4
Female	47	33.6
Educational level:		
Illiterate	12	8.6
Read and write	43	30.7
Moderate education	57	40.7
High education	28	20.0
Marital status:		
Single	49	35.0
Married	44	31.4
Widowed	12	8.6
Divorced	26	18.6
Separated	9	6.4
Occupation:		
Not working	67	47.9
Free work	22	15.7
Governmental work	44	31.4
Private work	7	5.0
Residence:		
Rural	102	72.9
Urban	38	27.1
Cohabitation:		
Alone	19	13.6
With family	86	61.4
With relatives	35	25.0

Table (2): Clinical data of patients in the study sample. (n=140)

Clinical data	No.	%
Age at the onset of the disease:		
< 20 years	12	8.5
From 20 to less than 40 years	84	60.0
≥ 40 year	44	31.5
Disease duration:		
< 1 year	15	10.7
1-<5 years	28	20.0
5-< 10 years	71	50.7
≥ 10 years	26	18.6
Frequency of hospitalization:		
Never	28	20.0
1-3 times	29	20.7
> 3 times	83	59.3
Do you take psychiatric medications regularly?		
Yes	45	32.1
No	95	67.9
Family history		
Yes	47	33.6
No	93	66.4
If yes, what is the disease? (n= 47)		
Schizophrenia	21	44.7
Depression	12	25.5
Bipolar disorder	14	29.8
What is your relationship with this patient? (n= 47)		
Father\ Mother	15	31.9
Uncle\ Aunt	11	23.5
Brother\ Sister	9	19.1
Grandfather\ Grandmother	12	25.5

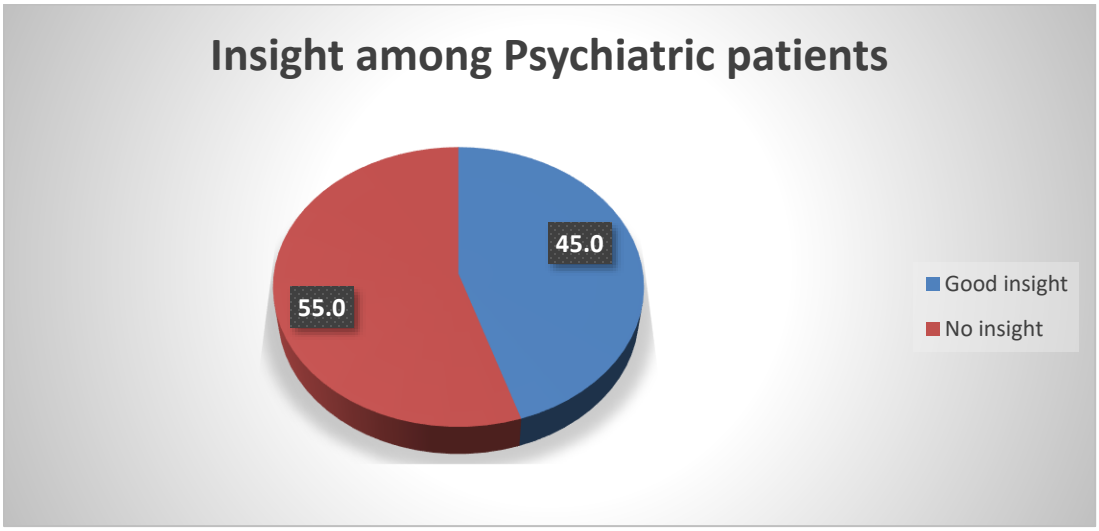

Figure (1): percentage distribution of the studied Psychiatric patients regarding their total Insight (n=140).

Table (3): statistically relation between total insight and social characteristics among studied patients

Social characteristics	Total insight				X^2	P-value
	Good (n=63)		No insight (n=77)			
	No	%	No	%		
Age/years						
< 30 years	35	55.6	21	27.3	22.939	0.000**
≥ 30 and < 40 years	3	4.8	22	28.6		
≥ 40 and < 50 years	25	39.7	28	36.4		
≥ 50 years	0	0.0	6	7.8		
Sex:						
Male	42	66.7	51	66.2	1.674	0.547
Female	21	33.3	26	33.8		
Educational level:						
Illiterate	3	4.8	9	11.7	42.071	0.000**
Read and write	5	7.9	38	49.4		
Moderate education	31	49.2	26	33.8		
High education	24	38.1	4	5.2		
Marital status:						
Single	23	36.5	26	33.8	10.247	0.042*
Married	21	33.3	23	29.9		
Widowed	5	7.9	7	9.1		
Divorced	10	15.9	16	20.8		
Separated	4	6.3	5	6.5		
Occupation:						
Not working	33	52.4	34	44.2	2.051	0.516
Free work	7	11.1	15	19.5		
Governmental work	20	31.7	24	31.2		
Private work	3	4.8	4	5.2		
Residence:						
Rural	44	69.8	58	75.3	3.179	0.417
Urban	19	30.2	19	24.7		
Cohabitation:						
Alone	9	14.3	10	13.0	9.478	0.047*
With family	36	57.1	50	64.9		
With relatives	18	28.6	17	22.1		

X2= Chi-square test. ** Highly statistically significant at p ‹ 0.01. *Statistically significant (p<0.05)

Table (3) displayed that, there was highly statistically significant relation between total insight of the studied patients and their age and educational level (P <0 .001). While, there was statistically significant relation between total insight of the studied patients and their marital status at (P= > 0.05).

Table(4) statistically relation between total insight and clinical data among studied patients

Clinical data	Total insight				X^2	P-value
	Good (n=63)		No insight (n=77)			
	No	%	No	%		
Age at the onset of the disease:						
< 20 years	5	7.9	7	9.1	7.541	0.002*
From 20 to less than 40 years	47	74.6	37	48.1		
≥ 40 year	11	17.5	33	42.9		
Disease duration:						
< 1 year	9	14.3	6	7.8	8.064	0.000**
1-<5 years	11	17.5	17	22.1		
5-< 10 years	29	46	42	54.5		
≥ 10 years	14	22.2	12	15.6		
Frequency of hospitalization:						
Never	13	20.6	15	19.5	5.174	0.031*
1-3 times	15	23.8	14	18.2		
>3 times	35	55.6	48	62.3		
Frequency of visits to outpatient clinics:						
Once a month	34	54.0	28	36.4	4.671	0.039*
Twice a month	19	30.2	42	54.5		
3 times a month or more	10	15.9	7	9.1		
Do you take psychiatric medications regularly?						
Yes	19	30.2	26	33.8	2.749	0.062
No	44	69.8	51	66.2		
Family history						
Yes	27	42.9	20	26.0	3.041	0.054
No	36	57.1	57	74.0		

X2= Chi-square test. ** Highly statistically significant at p ‹ 0.01. *Statistically significant (p<0.05)

Table (5): Multiple linear regression model to predict Total Insight among the studied patients (n=140)

Items	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	P-value
Constant	29.488	8.567		3.442	0.000**
Age	-0.115	0.084	-0.071	-1.370	0.173
Educational leve	1.085	0.318	0.278	3.412	0.001**
Age at onset	-0.342	0.139	-0.185	-2.460	0.015*
Disease duratio	-0.297	0.128	-0.168	-2.320	0.022*
Frequency of hospitalization	-4.235	1.120	-0.251	-3.780	0.000**

Model summary:
$R = 0.731$, $R^2 = 0.534$, Adjusted $R^2 = 0.521$, Std. Error = 6.205
ANOVA: $F = 45.783$, df = (3, 136), p = 0.000**

Discussion:

Lack of insight has negative effects on individuals, families, communities, and the course of illness because it fails to perceive the need for treatment, which results in medication non-adherence (Tariku, 2019). Alternatively, good insight is linked to greater overall functioning and enhanced personal growth in certain domains, such as social adjustment or job performance (Garca-Cabeza, Daz-Caneja, 2018). Therefore, the present study aimed to assess the relationship between insight and both demographic and clinical characteristics among patients with schizophrenia.

Regarding personal characteristics of the studied patients, the current study results revealed that, more than one third of the studied patients aged less than 30 years old with a mean score of 36.24±7.67. Also the majority of them were male, live with family. Moreover, more than two thirds of patients were residing in rural areas, more than one third had moderate education level and not working. For marital status, most of patients had no spouse .

These results come in line with a study of Ragab et al., (2022) in Egypt about factor affecting aggressive behaviors among patients with schizophrenia who reported that approximately a third of the patients were between ages of 20 and 29 year. Similarly, this result is in harmony with the study conducted by Elsayed et al.,(2022) in Egypt, which reported that nearly three quarters of the studied schizophrenic patients were male. In a similar vein Filipcic et al., (2020) in croatia, who study "Gender differences in early onset chronic played multimorbidities in schizophrenia spectrum disorder " and found that, less than half of the studied patients had secondary education. This finding was similar to the study done by Mahmoud et al., (2021) in Egypt about "Relation between quality of life and locus of control among schizophrenic patients" which clarified less than two thirds of patients were single. This result was in accordance with the study performed by Luo et al., (2020) in China about "Gender difference in the association between education and schizophrenia in chinese adult" who found that, more than half of the patients with schizophrenia were living in rural area. Also, Mohamed et al., (2021) in Egypt, in their study about "Relationship between hospitalization related stress and social support among psychiatric patients" reported that, more than two thirds of the studied patients were living with their family.

Regarding the clinical characteristics of the studied patients, the present study results revealed that more than half of the studied patients didn't have family history of schizophrenia. Also, more than half of them their age at onset of disease was from 20 to less than 40 years. Moreover, half of them their duration of disease ranged from 5 to less than 10 years. Also, more than half of them have 3 or more frequency of hospitalization. Also, majority of them visited outpatient clinics once a month. This might be interpreted by number of factors, as regards to family history the facts that most cases of schizophrenia occur without a family history because. Many people develop schizophrenia due to a combination of genetic mutations and environmental triggers rather than inherited traits. Regarding age at onset of the disease and visits outpatients, may be explained by the nature of the illness in its prevalence between late adolescences and early adulthood and continuous follow up to outpatient is important for management of disease and relapse prevention. Also, concerning duration of the disease the fact that schizophrenia is chronic psychiatric illness and progressive and disabling condition.

This finding was similar to the study done by Mohammed, Osman and Barakat, (2022) in Egypt, about "Relationship between positive, negative symptoms and quality of life among schizophrenic patients" which revealed that more than half of the studied patients their age at the onset of disease were ≥ 30 years. And a study by Ageeb et al., (2022) found that (77.8%) of the sample were having the disease for more than three years. Panov and Panova, (2023) in Bulgaria, in their study about "Obsessive-compulsive symptoms in patient with schizophrenia: The influence of disorganized symptoms, duration of schizophrenia, and drug resistance" which showed that most of the studied patients visited outpatient clinics once a month. And a study by Abd-Elhamid et al., (2022) about Emotional Recognition among Patients with Schizophrenia, clarified that about two thirds of the studied patients admitted to the hospital more than 3 times.

Concerning the overall insight level of the patients under investigation, the current study found that slightly more than half of studied patients had no insight. This result may be due to neurobiological differences associated with self-awareness and cognitive functions and may be social cognitive challenges further more

negative symptoms such as social withdrawal that can significantly affect treatment adherence and outcomes and longer duration of illness and more hospitalizations .

This result was consistent with a study conducted by Aziz and Sayed, (2016) in Egypt, about relationship between insight and psychotic symptoms among psychiatric inpatients, who reported that more than half of the patients had poor insight. Also, Manea, Zaki and Morsi, (2020) in their study about the relationship between insight and quality of life among schizophrenic patients revealed that more than one third had insight-less. Moreover, this outcome was consistent with a research performed in turkey by Erol et al., (2015) about the impact of insight on social functioning in patients with schizophrenia and found that slightly less than half of patients with impaired insight. In a similar vein, Hassan et al., (2019) in their study about the impact of insight on medication adherence in schizophrenic patients indicated that, 70% of the studied subjects reported that they had impaired insight . On the other hand, this result was in disagreement with the study done by Beainy, et al., (2023) Who demonstrated a low percentage (19.5%) of patients with impaired insight, which could be attributed to the fact that all patients get psychoeducation sessions on a regular basis and stay in the hospital for a prolonged time.

The present study results revealed that, there was highly statistically significant relation between total patients' insight and their age and educational level. Also, there was statistically significant relation with their marital status and cohabitation. This can be due to the majority of the studied sample had moderate education. Individuals with more years of education may demonstrate a greater capacity to understand complex concepts related to mental illness, potentially facilitating insight and marriage can offer social support and potentially reduce symptoms.

This result was in agreement with study done by Alhadidi et al., (2021) they reported that there was statistically significant relation between total level of insight and level of education and marital status of the studied patients. This result was congruent with the study performed by Taha et al., (2024) in Mansoura ,Egypt, about Insight and empathy in schizophrenia: Impact on quality of life and symptom severity who reported that there was statistically significant relation between total level of insight among the studied patients and their age. However, this result was in disagreement with study performed by Atoni et al., (2021) in Lebanon, who study the relationship between clinical insight and cognitive and affective empathy in schizophrenia and reported that insight did not significantly correlate with educational level. this result was in agreement with study done by Alhadidi et al.,(2021)who reported that there was significant relation between total level of insight and marital status of studied patients

The present study results presented that, there was highly statistically significant relation between total patients' insight and their duration of disease. And statistically significant relation total patients' insight and their age at onset of disease, frequency of hospitalization and frequency of visits to outpatient clinics

This result was consistent with a study conducted by Aykut, (2017) suggesting that prolonged disease may exacerbate insight impairment. This result was consistent with the study performed by Şahin, Elboga and Altindag, (2020) who reported that significant differences in insight, treatment adherence, and functionality among schizophrenia patients based on participation frequency in Community Mental Health Centers, indicating that increased visit frequency positively correlates with improved insight and overall treatment outcomes

The results demonstrated that age at onset of disease and disease duration were statistically significant independent negative predictor of the total insight score. This indicated that earlier onset, longer illness duration and frequent hospitalization correlate with lower insight levels. While, educational level of the studied patients was statistically significant positive predictor of the total insight score.

This result was consistent with the study carried out by Zorlu et al., (2017) in turkey and reported that certain aspects of clinical insight in schizophrenia have been found to be predicted by the age at which the illness began and the length of the illness. In a similar vein a study performed by Gilleen, Strelchuk and Palmer, (2017) in London suggested that Long-term illness may make insight impairment worse, this result was consistent with Ramu et al., (2019) in London and Haddad et al ., (2023) in Lebanon whose study indicated that Poor insight in patients with schizophrenia is associated with a higher likelihood of hospitalization. This

result was consistent with study done by Barbalat et al., (2023) who reported that people with more education may be better able to identify their condition and the needs for treatment.

Conclusion:

Based on the findings of the current study, it can be concluded that slightly more than half of schizophrenic patients had no insight and more decrease in insight among patients occurs when being single, not working, aged between twenty and less than forty and with longer disease duration.

Recommendations:

Based on the results of this research, the following recommendations are suggested:

Based on the current study findings the following recommendations are suggested:

1. Developing psychoeducational programs that educate patients with schizophrenia about the disorder.
2. Educating caregivers and nurses on how to provide interventions that improve insight, particularly during a patient's initial psychotic episode
3. More research is needed to guide the development of treatments for schizophrenia that emphasize insight enhancement.
4. develop training programs in order to improve insight in patients with schizophrenia.

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Author’s contributions

N.A.E. came up with the idea for the study, wrote the proposal, collected and analyzed the data, and wrote the manuscript. The research methodology, data analysis and interpretation, discussion, comparison of the findings with recent literature in the field, writing, editing, and summarizing of the paper were all developed with the help of S.F.M. and H.S.I. Every author has reviewed and approved every section of the thesis.

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