Relation between Alexithymia, Psychological Resilience and Suicidal Ideation among Patients with Schizophrenia

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Abstract

Background:

Schizophrenia is a severe chronic mental disorder that affects about 1% of the global population. **Aim of study:** assess the relation between alexithymia, psychological resilience and suicidal ideation among patients with schizophrenia. **Design**: A descriptive correlational research design was utilized to achieve the aim of the study. **Setting**: This study was conducted at psychiatric health hospital and addiction treatment at benha city, Qalubia Governorate. **Study subject**: Convenient sample of 100 patients with schizophrenia. **Tools of Data collection:** four tools were used: **Tool 1:** Structured Interview Questionnaire, **Tool 2:** The Toronto Alexithymia Scale (TAS), **Tool 3:** The Connor-Davidson Resilience Scale (CD-RISC) and **Tool 4:** Beck Scale for Suicide Ideation (BSS). **Results**; less than two thirds of the patients with schizophrenia tend to report high level of alexithymia and around three quarters of them had low level of psychological resilience. Also, half of the studied patients had low risk of suicidal ideation **Conclusion**: there was a strong statistically significant positive correlation between total suicidal ideation and alexithymia among the studied patients with schizophrenia. While, there was a strong statistically significant negative correlation between total alexithymia and psychological resilience, also between total suicidal ideation and psychological resilience among the studied patients with schizophrenia. **Recommendations**: Psycho- educational nursing programs should be conducted to improve psychological resilience, decrease alexithymia and suicidal ideation among patient with schizophrenia.

Keywords: Alexithymia, Psychological Resilience, suicidal ideation, Schizophrenia.

Introduction

Schizophrenia is a severe chronic mental disorder that affects about 1% of the global population It typically starts in late adolescence or early adulthood and characterized by positive symptoms, negative symptoms and cognitive symptoms **(Zabihi et al., 2024).** People with schizophrenia often have problems doing well 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 They might feel frightened and withdrawn, and could appear to have lost touch with reality.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 **(Elsayed et al., 2022).**

People with schizophrenia experience problems in identifying and expressing their own emotion called alexithymia. The concept of alexithymia has sparked interest in determining variables that affect individual variations in emotional awareness levels and how emotions are processed cognitively. The capacity to recognize, express and process emotions is necessary for being long – lived, identifying and expressing one's emotions is key to coping with bad feeling **(Aydın et al., 2024).**

Various psychological concerns, including interpersonal difficulties, aggression, somatization, obsessionality, depression and anxiety are predicated by alexithymia .Individuals with various psychopathologies are said to have much greater prevalence of alexithymia in the clinical residents of clients with schizophrenia as well as the general population, alexithymia also has been linked to suicidal ideation. Additionally a meta- analytical study revealed a significant association between alexithymia and mental illness such as schizophrenia **(Ozdemir et al., 2025).**

Psychological resilience is described as a personality feature that overcomes severely stressful life circumstances. The capacity of a person to maintain their equilibrium despite a traumatic or stressful incident is known as resilience. Individuals with strong levels of psychological resilience are more adaptable and capable of handling life's challenges and psychopathologies, which improves psychological wellness **(Abd-Elhamed et al., 2023)** .

Resilience plays an important role in the prevention and recovery of psychiatric disorders, further studies suggested that high resilience reduced the risk of suicide in participants with schizophrenia, and had a positive impact on the long-term recovery in schizophrenia. **(Chuang et al ., 2023).** Recent systematic reviews and meta –analysis suggest that people with schizophrenia are significantly more probably to have suicidal ideation and attempt suicide compared to general population**(Sharma et al., 2023).**

Suicidal ideation is defined as the presence of active or passive thoughts about killing oneself without preparatory behavior. The suicidal ideation rate is positively correlated with positive symptoms of schizophrenia, suicidal ideation more common among adults patients with schizophrenia with higher levels of hallucination and delusion **(Sharma et al., 2023).** Also, some people with schizophrenia who experience negative stressors are resilient to the impact of suicide risk suggest that low psychological resilience, moderate and high levels of psychosis and associated distress can alter the impact of suicide precursors on suicidal thoughts **(Harris et al., 2020).**

Research indicates that patients with schizophrenia who exhibit high levels of alexithymia are more likely to experience suicidal ideation. The interplay between these factors suggests that individuals with alexithymia may struggle to understand the impact of their emotional pain, leading them to view suicide as a viable escape from their suffering. Additionally, the lack of emotional expression associated with alexithymia can exacerbate feelings of isolation, making it harder for these individuals to form meaningful connections with others. As social support is a critical component of resilience, the absence of strong interpersonal relationships can further increase the risk of suicidal thoughts **(Abd-Elhamed et al., 2023).**

Psychiatric nurses have an important role toward schizophrenic patients in achieving functional recovery to develop meaningful life, social functioning, achieving good prognosis and good quality of life. For instance, targeting prognosis or interventions to improve psychological resilience and coping with difficult situations to prevent suicide ideation is important by developing novel intervention strategies **(Hamed & Ali, 2020).** Additionally, the nurse should encourage the patient to communicate honest emotions, including anger, examine verbal and nonverbal cues, and monitor the patient's compliance with safety plan procedures while still hospitalized in order to assess the patient's suicidal ideation (**Ageeb et al., 2022).**

Significance of study

Schizophrenia is a severe mental illness that affects around 24 million people worldwide or 1 in 300 people (0.32%) **(Yi et al., 2024)**. While in Egypt, the number of patient with schizophrenia is estimated to be about 1 million people **(Ageeb et al., 2022)**. Schizophrenia has been referred to as a key suicidal determinant. Suicidal ideation rates in schizophrenic patients ranged from 40-50%, while the number of suicide attempt ranged from 1 to 60 % **(Sharma et al., 2023)**.

Moreover, suicide risk has been linked to a reduced level of resilience which the individuals with strong levels of psychological resilience are more adaptable and capable of handling life's challenges and psychopathologies that able to identifying, express their feeling and improves psychological wellness. Increased emotion deregulation and a lack of resilience are substantially related to increased psychotic symptoms severity and suicide rate **(Abd-Elhamed et al., 2023).** Alexithymia has been associated with higher condition severity and its presence may raise the risk of suicide especially in patient with schizophrenia. Therefore, the present study will be directed to assess the relation between alexithymia, psychological resilience and suicidal ideation among patients with schizophrenia. Multiple research study conducted revealed that decreased levels of Psychological resilience were related to increased levels of suicidal ideation ***Harris et al., (2020).*** In additional another study found that suicidal ideation and resilience had a very strong negative correlation ***Zarei, (2021)*.**

Aim of the study:

This study aims to assess the relation between alexithymia, psychological resilience and suicidal ideation among patients with schizophrenia.

Research questions:

1-What is the level of alexithymia among patients with schizophrenia?
2-What is the level of psychological resilience among patients with schizophrenia?
3-What is the level of suicidal ideation among patients with schizophrenia?
4-What is the relation between alexithymia, psychological resilience and suicidal ideation among patients with schizophrenia?

Subject and methods:-

Research Design:

Descriptive correlational research design was utilized to conduct this study.

Research Setting:

The study will be conducted at psychiatric health hospital and addiction treatment at benha city, Qalubia Governorate, which is affiliated to General Secretariat of Mental Health in Egypt .

Research Subject:

Sample size:

The estimated sample size is 100 patient with schizophrenia from 135 from hospital departments according to formula by **Thompson, (2012).**

$$n = \frac{N \times p(1-p)}{\left[\left[N-1 \times \left(d^2 \div z^2\right)\right] + p(1-p)\right]}$$

Sample type:

A Convenient sample with patients diagnosed with schizophrenia will be used in the current study.

Sample technique:

A convenient sample of 100 patient with schizophrenia were selected from the psychiatric health hospital and addiction treatment at benha city, Qalubia Governorate.

Tools of Data Collection:

In order to achieve the aim of study, the following tools will be used :

Tool (1):- A Structured Interview Questionnaire: to assess the following parts:

Part (2):- Demographic data: which include (age, sex, marital status, educational level, occupation, and residence) .

Part (2):- Clinical data: Which include (age at onset of the disease ,duration of illness, number of previous hospitalization, mode of admission, family history of psychiatric disease).

Tool (III):- The Toronto Alexithymia Scale (TAS):

This scale was developed by **Bagby et al., (1994).** It self- administrated questionnaire designed to measures difficulty in identifying and describing emotions, which was a big part of alexithymia used to evaluate emotion of patients. It consisted of 20-item divided into 3 subscales: "Difficulty describing feeling: (5 items), Difficulty identity feeling: (7 items) and "Externally oriented thinking, (8 items). Each item was scored on a 5- point Likert scale (1- strongly disagree; 2- disagree;3- neither agree nor disagree; 4- agree;5- strongly agree). Reverse scoring for items 4,5,10,18 and 19. Total scores ranged from 20-100. Obviously the higher score points, reflect greater challenges or Impairment (alexithymia).

Scoring system:-

- ≤ 51 indicated no alexithymia.
- 52 - 60 indicated possible alexithymia.
- > 60 indicated alexithymia.

Tool III:- The Connor-Davidson Resilience Scale (CD-RISC):

This scale was originally developed by **Connor - Davidson**, **(2003)** and adapted by **Moktar et al., (2021)** to established reference values for resilience in the general population and in clinical samples. The scale consisted of 25 items divided into 5 subscales covered the resilience characteristics and included (personal competence consisted of (7 items), control consisted of (5 items), acceptance of change and secure relationships consisted of (4 items), trust/ tolerance /strengthening effects of stress consisted of (7 items) and spiritual influences consisted of (2 items). The response options ranged from (0) not true at all, (1) sometimes

true and (2) true nearly all of the time. Total score ranged from 0-50. Obviously the higher score points, indicated greater resilience.

Scoring system:

- (<50%) 0-24 indicated low resilience .
- (50-70%) 25-35 indicated moderate resilience.
- (>70%) 36-50 indicated high resilience.

Tool IV: Beck Scale for Suicide Ideation (BSS) :

It was developed by Beck, (1991), it used to assess attitudes and behaviors of the patient for assessing a patient's suicide risk. The BSS consisted of 19 statement groups each assessed various aspects of suicidal ideation. Each statement group consisted of three sentences that described different intensities of suicidal ideation, representing a three-point scale from (zero to 2). Participants were instructed to choose the particular statement of each group that was most applicable to them. The total score ranged from zero to 38. Obviously the higher score points, indicated a greater risk of suicide.

Scoring system :

- < 8 indicated no risk for suicidal ideation.
- 8-16 indicated mild risk for suicidal ideation.
- 17-26 indicated moderate risk for suicidal ideation.
- 27-38 indicated severe risk for suicidal ideation.

Operational Design:

The operational design for this study included preparatory phase content validity of the tool, reliability of the tool, pilot study and field work.

Preparatory Phase:

An extensive review of available literature related to the study area was done including electronic dissertation, available books, articles, research and peer interaction and idea from external sources to formulate knowledge base relevant to the study and to prepare the necessary tools of data collection. The questions were translated into Arabic, so that they were understandable to the studied patient.

- Content Validity of tool:

Tools of the study will be reviewed for appropriateness of items and content validity by jury of 5 experts in psychiatric and mental health nursing and the necessary modification will be done accordingly. Reliability of tools will be measured by appropriate statistical test.

- Reliability of the tool:

Test the reliability of the tools through Alpha Cronbach reliability analysis.

Tools	Alpha Cronbach
Alexithymia	0.862
Psychological resilience	0.907
Suicidal ideation	0.715

Administrative Design

Administrative Approval:

Before conducting the study, official agreement letter would obtained from Scientific Research Ethics Committee code number (REC-PSYN-M 9) at the faculty of nursing, Benha University, then an official letter was obtained from dean of faculty of nursing, Benha University to the director of psychiatric health hospital and addiction treatment at Benha city to took approval for carrying out consisted the study. After that an official approval was obtained from the human rights protection committee of general secretariat of mental health in Egypt after research revision of the study protocol and tools, then an official approval was obtained &introduced to the director of the psychiatric mental health hospital for carried out data collection.

- Ethical Consideration:

An official approval was taken from Scientific Research Ethical Committee. The researcher was clarified the aim of the study to the patients and they were assured for

maintaining anonymity and confidentiality. The studied patient was 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.
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 (Actual Study):

1- The researcher was introduced himself to the patients who agreed to be included in this study .

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 from hospital department in visiting room.

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 tool was around 40to50 minutes, the first instrument (demographic& clinical data) filled in about10 minutes, the second instrument (Toronto Alexithymia Scale (TAS) filled in about10 minutes, the third instrument (Connor-Davidson Resilience Scale (CD-RISC) filled in about15 minutes and the fourth instrument (Beck Scale for Suicide Ideation (BSS) filled in about15 minutes.

7-The process of data collection took about 3months started from December 2024 to February 2025 and occurred 2 days per week (Sunday, Monday), about 4-5 patients per day, 9-10 patients per week, 30-35 patients per month.

IV-Statistical Design

Statistical Analysis:

The statistical analysis of data was done by using the computer software of Microsoft Excel Program and Statistical Package for Social Science (SPSS) version 25. Data were presented using descriptive statistics in the form of frequencies and percentage for categorical data, the mean (X) and standard deviation (SD) for quantitative data. Chi square test used to assess the association between two variables. Correlation coefficient test (r) was used to test the correlation between studied variables. Linear regression model was used to analysis of the predictors of patients' alexithymia, psychological resilience and suicidal ideation. Reliability of the study tools was done using Cronbach's Alpha.

Degrees of significance of results were considered as follows:

- P-value ≥ 0.05 Not significant.
P-value < 0.05 Significant .
- P-value < 0.001 Highly Significant

Results

Table (1) shows that, less than half (44.0%) of the studied patients their age ranged between 40<50 years, with mean age are 48.99±6.47 years. As regard to sex and marital status, more than three quarters and two fifths (78.0% and 60.0%) of them are male and single, respectively. In addition, more than one-third (36.0%) of them have primary education, the majority (85.0%) of them don't work, and three quarters (75.0%) of them residing at rural areas.

Table (2) displays that, less than one third (30%) of the studied patients their age at the onset of the disease are at ≥35 years, with mean age 26.96±7.66 years. Moreover, less than half of them (41.0%) have disease of schizophrenia from ≥20 years, with mean age

is 14.33±5.01. Also, more than half of them (51.0%) admitted to hospital about 7 times and above previously. Likewise, the vast majority (96.0%&93.8%) of the studied patients are admitted to the hospital in an involuntary manner with their families respectively. Also, less than one third (26.0%) of them had family history of psychiatric disease, more than two thirds (69.2%) of them suffered from schizophrenia and more than two thirds (69.2%) of them are first degree relatives.

Figure (1): shows that, more than three quarters (77.0%) of the studied patients have alexithymia, less than one fifth (15.0%) of them possible to have alexithymia, while the minority (8.0%) of them don't have alexithymia.

Figure (2): displays that, around three quarters (74.0%) of the studied patients have low level of psychological resilience, less than one fifth(16.0%) of them have moderate level of psychological resilience, while the minority (10.0%) of them have high level of psychological resilience.

Figure (3): shows that, half (50.0%) of the studied patients have low risk for suicidal ideation, more than one quarter (29.0%) of them have moderate risk for suicidal ideation, while the minority (13.0%) of them have no risk for suicidal and the minority (8.0%) of them have high risk for suicidal ideation.

Table (4): shows that, there is a strong statistically significant positive correlation between suicidal ideation and alexithymia among the studied patients with schizophrenia at (P= < 0.001). While, there is a strong statistically significant negative correlation between alexithymia and psychological resilience among the studied patients at (P= < 0.001). Moreover, there is a strong statistically significant negative correlation between suicidal ideation and psychological resilience among the studied patients at (P= < 0.001).

Part (I): Demographic and clinical data of the studied patients.

Table (1): Distribution of the studied patients according to their demographic data (n=100).

Demographic data of the studied patients	Studied patients (n=100)	
	No.	%
Age (Years)		
20<30 years	**4**	**4.0**
30<40 years	**20**	**20.0**
40<50 years	**44**	**44.0**
50<60 years	**27**	**27.0**
≥ 60 years	**5**	**5.0**
Mean SD **48.99±6.47**		
Sex		
Male	**78**	**78.0**
Female	**22**	**22.0**
Marital status		
Single	**60**	**60.0**
Married	**17**	**17.0**
Divorced	**16**	**16.0**
Widowed	**4**	**4.0**
Separated	**3**	**3.0**
Educational level		
Illiterate	**19**	**19.0**
Read and write	**8**	**8.0**
Primary education	**36**	**36.0**
Secondary education	**28**	**28.0**
University education	**9**	**9.0**
Occupation		
Working	**15**	**15.0**
Not working	**85**	**85.0**
Residence		
Rural	**75**	**75.0**
Urban	**25**	**25.0**

Table (2): Distribution of the studied patients according to clinical data (n=100).

Clinical data of the studied patients.	Studied patients (n=100)	
	No.	%
Age at onset of the disease (Years)		
15 < 20 years	23	23.0
20 < 25 years	13	13.0
25 < 30 years	18	18.0
30 < 35 years	16	16.0
≥ 35 years	30	30.0
Mean SD 26.96±7.66		
Duration of illness		
1 < 5 years	14	14.0
5 < 10 years	14	14.0
10 < 15 years	13	13.0
15 < 20 years	18	18.0
≥٢٠ years	41	41.0
Mean SD 14.33±5.01		
Number of previous hospitalization		
1- 3 times	31	31.0
4- 6 times	18	18.0
7 times and above	51	51.0
Mode of admission		
Voluntary	4	4.0
Involuntary	96	96.0
In case of involuntary admission, is it through (n=96)		
Family	90	93.8
Transfer from another hospital	3	3.1
Police	2	2.1
Neighbors	1	1.0
Family history of psychiatric disease		
Yes	26	26.0
No	74	74.0
If yes, what is the disease? (n=26)		
Schizophrenia	18	69.2
Depression	4	15.4
Bipolar disorder	4	15.4
The relationship with the patient (n=26)		
First degree relatives	18	69.2
Second degree relatives	8	30.8

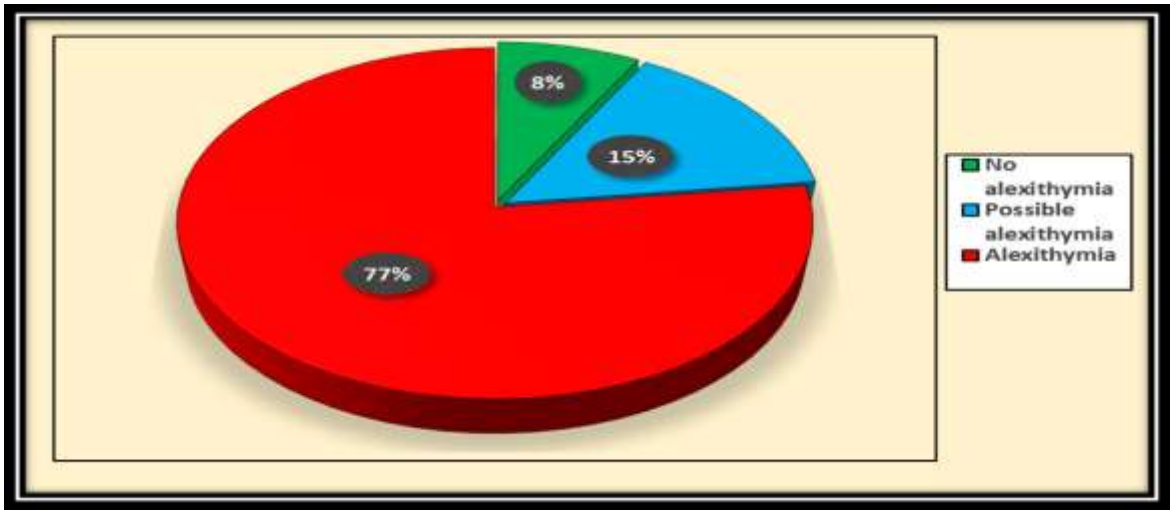

Figure (1): Level of alexithymia among the studied the studied patients (n=100).

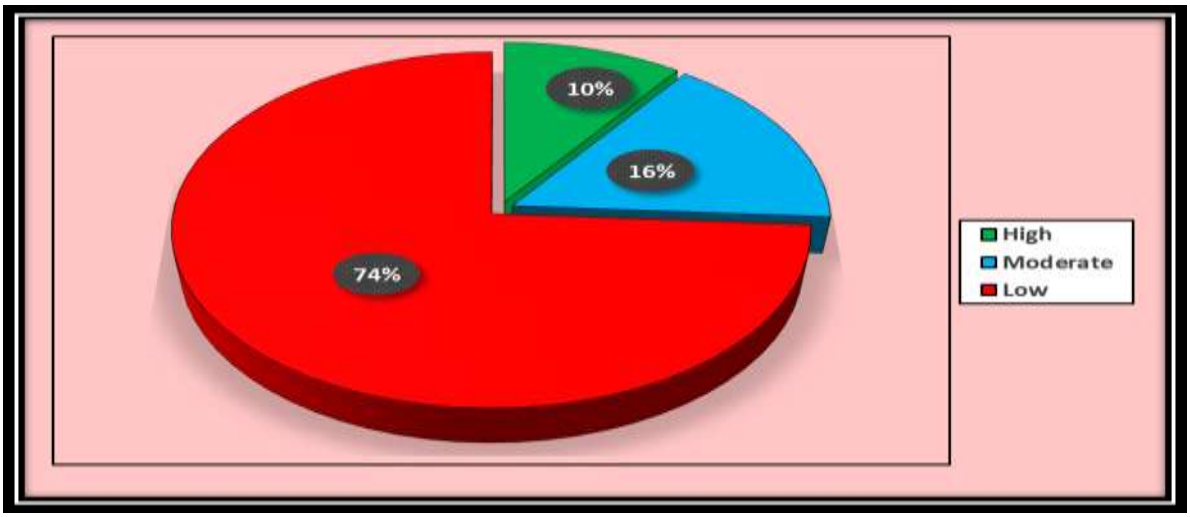

Figure (2): Level of psychological resilience among the studied patients (n=100).

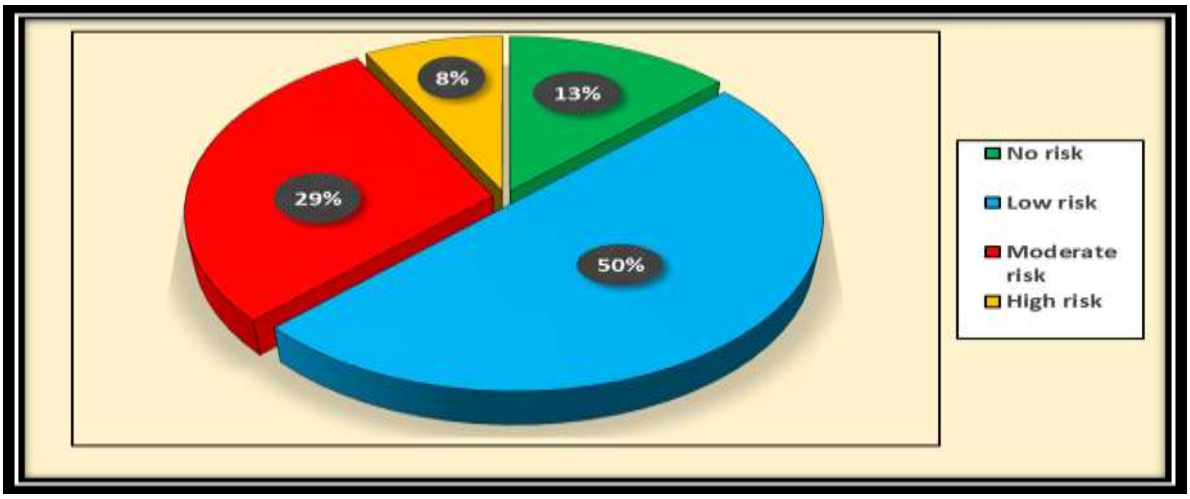

Figure (3): Levels of suicidal ideation among the studied patients (n=100).

Correlation between the studied variables.

Table (4):Correlation between alexithymia, psychological resilience and suicidal ideation among patients with schizophrenia (n=100).

Variables	Total alexithymia score		Total psychological resilience score	
	r	p-value	r	p-value
Total alexithymia score			**-0.926-**	**0.000****
Total suicidal ideation score	**0.864**	**0.000****	**-0.749-**	**0.000****

r=Pearson correlation coefficient test**. (-): Negative correlation. ****Highly significant at p ‹ 0.001.
Interpretation of r: **Intermediate** (0.25-0.74), **Strong correlation** (0.75-0.99).

Discussion

Alexithymia, characterized by difficulty in identifying and expressing emotions, is common elevated in individuals with schizophrenia and is associated with increased risk of suicidal ideation. This may be due to impaired emotional regulation and communication ***(Xiao et al., 2024)***. Conversely, Psychological resilience defined as the capacity to effectively cope with stress and recover from adversity- acts as a protective factor, potentially buffering the negative effects of alexithymia on mental health. Studies indicate that higher resilience is linked to lower level of suicidal ideation, even in the presence of alexithymia. Therefore, interventions that enhance emotional awareness and resilience may reduce suicidal risk in this population ***(Wang et al., 2024).*** In the light of the previous, the current study was conducted to assess the relation between alexithymia, psychological resilience and suicidal ideation among patients with schizophrenia.

Part (I): Demographic and clinical data of the studied patients.

Regarding the studied patients' demographic data, the present study indicated that less than half of the studied patients their age ranged between 40 to less than 50 years old, with mean age of 48.99±6.47 years. From researcher point of view, this might be due to the chronic and long-term nature of schizophrenia, where the onset typically occurs in late adolescence and early adulthood, but as patients age and continue to live with the condition, a significant proportion naturally falls into the middle-aged group.

This finding was supported by ***Salim et al., (2023)*** who conducted a study about " Correlates of Caregiver Burden among Family Members of Patients with Schizophrenia at Benha Psychiatric Health and Addiction Hospital, and founded that the majority of the studied patient's their age ranged between 40 to less than 50 years. In contrast, ***Mohamed et al., (2022)*** who conducted a study entitled "Relationship between positive, negative symptoms and quality of life among schizophrenic patients and founded that less than half of the studied patients their age ≥ 40 years with mean age 38.7± 12.63 years.

Concerning sex, the result of current study showed that more than three quarters of the studied patients were male. From researcher point of view, this might be due to the fact that schizophrenia tends to have an earlier onset and more severe course in males compared to females, leading to a higher prevalence of males among diagnosed patients. Also, biological, hormonal, and social factors may contribute to this gender difference.

This finding was in accordance with ***Zhou et al., (2024)*** who conducted a study about "Suicidal ideation in Chinese patients with chronic schizophrenia: prevalence, clinical correlates, and relationship with alexithymia" and reported that nearly two thirds of the studied patients were male. Conversely, a study by **Gabrielle et al., (2024)** in Egypt, entitled "The psychopathology among the offspring of schizophrenia and bipolar I disorder patients in an Egyptian sample: A comparative study," and founded that more than two quarters of the studied patients were female. Furthermore, a study by ***Ahmed et al., (2022) ,*** entitled " Effect of family caregiver expressed emotion control program on relapse among patients with Schizophrenia" and founded that nearly to two thirds of the studied patients were females.

As regard marital status, the present study reflected that, more than two fifths of the studied patients were single. From researcher point of view, this result might be due to that, the debilitating nature or impact of the illness on the overall functioning of the individual which make patients face difficulties to keep up marital relations as majority of them were single. This result was consistent with a study conducted by ***Khait et al., (2025)*** who conducted a study to evaluate "The association between psychotic symptoms and suicidal ideation in a sample of patients with schizophrenia: The moderating effect of the frequency of suicidal thoughts" in Jordan, and reported that the highest percentage of the studied patients were single.

Concerning level of education, the present study demonstrated that, more than one-third of the studied patients had primary education. From researcher point of view, this result might be due to the cognitive impairments, social withdrawal, and functional decline associated with the illness may limit their ability to progress beyond primary education. Additionally, societal stigma, limited family support, and economic hardships that commonly faced by patients and their families.

This result agreed with ***Mikhael et al., (2020)*** who conducted a study entitled "Evaluation of suicide risk in chronic schizophrenic hospitalized patients" in Egypt, and found that the largest proportion of the studied patients had primary education. Also, this finding disagreed with ***Ayalew et al., (2021)*** who conducted a study about "Suicide behavior and its predictors in patients with schizophrenia in Ethiopia" and reported that the highest percentage of the studied patients had secondary education.

Concerning occupation, the present study displayed that, most of the studied patients didn't work, this result might be due to symptoms such as disorganized thinking, poor concentration, lack of motivation, and social withdrawal can severely limit patient's ability to perform job-related tasks and interact effectively in the workplace.

In the same line, ***Manea et al., (2020)*** who conducted a study about "The relationship between insight and quality of life among schizophrenic patients" in Egypt, and found that more than two thirds of the patients were unemployed. On contrary, a study performed by ***Ogunnubi et al., (2022)*** who conducted a study entitled "From ideation to attempt: A study of suicidality and its correlates amongst patients with schizophrenia in a resource-poor country" in Nigeria, and found that, almost three fifths of the studied patients were employed.

According to residence, the present study portrayed that, three quarters of the studied patients were residing at rural areas. From the researcher point of view, it could be due to that such areas had low socioeconomic status of the individuals is a risk factor of incidence of schizophrenia and such type of mental illness attributed to a demonic possession or magic which in resulting poor prognosis in rural areas.

Aligned with this result, ***Ahmed et al., (2022)*** who conducted a study to investigate "Relationship between suicidal thoughts and positive symptoms among Schizophrenic patients" in Egypt, and noticed that more than half of studied patients were rural residents. On the other hand, a study performed by ***Setiawati et al., (2020),*** about "Differences in sociodemographic characteristics of Schizophrenia patients between rural and urban areas in badung regency" in Bali, and found that majority of the patients with schizophrenia were lived in urban area.

As regard the studied patients' clinical data, the present study illustrated that less than one third of them their age at the onset of the disease was 35 years or more, with mean age 26.96±7.66 years. Moreover, less than half of them had schizophrenia from 20 years or more, with mean age was 14.33±5.01. This may be due to the fact that schizophrenia typically has its onset in late adolescence or early adulthood. This finding was parallel with result of ***Li et al., (2022)*** who conducted a study about "Suicidality in clinically stable bipolar disorder and schizophrenia patients during the COVID-19 pandemic" in China, and found that the mean age of disease onset was 24.79 (10.16). Also, this finding matched with the result of ***Lim et al., (2021)*** who noticed that patients' mean age of schizophrenia onset was 26.12 (8.86) years and their mean duration of illness was 16.63 (11.91) years.

In addition, the current study revealed that, more than half of the studied patients admitted to hospital about 7 times and above previously. As well, the vast majority of them were admitted to the hospital in an involuntary manner. This might be due to the chronic and relapsing nature of schizophrenia, which often necessitates repeated hospitalizations, especially in cases where patients struggle with treatment

adherence or experience severe symptom exacerbations. This finding was in harmony with ***Ahmed et al., (2022)*** who reported that majority of Schizophrenic patients were mandatory entry. In the same vein, ***Ageeb et al., (2022)*** whose study found that the largest proportion of the studied patients with schizophrenia had experienced more than three hospitalizations.

Furthermore, the present study displayed that more than one quarter of the studied patients had family history of psychiatric disease, more than two thirds of them suffered from schizophrenia and were first degree relatives. This may be due to the strong genetic and hereditary factors associated with psychiatric disorders, particularly schizophrenia, which is known to have a significant familial component.

In the same context, ***Shang et al., (2024)*** who conducted a study entitled "Gender difference in association between clinical symptoms and alexithymia in chronic schizophrenia: A large sample study based on Chinese Han population" and stated that most of patients had positive family history of psychotic disorder and majority of them had family history of schizophrenia and first degree relatives. Conversely, ***Yi et al., (2023)*** who found that most of the studied patients had negative family history of psychotic disorder.

Part (II): Level of alexithymia among the studied patients.

Regarding total level of alexithymia among the studied patients, the current study represented that more than three quarters of them had alexithymia. Also, less than one fifth of them possible to had alexithymia. This could be attributed to patients' impaired ability to identify and describe their feelings, a core characteristic of schizophrenia. Furthermore, cognitive deficits, negative symptoms, and reduced interpersonal communication commonly associated with the disorder may further contribute to emotional unawareness.

This result was compatible with the result of ***Ozdemir et al., (2025)*** who conducted a study entitled "Alexithymia in schizophrenia and psychosis vulnerability" in UK, and reported that the most of the studied patients with Schizophrenia had Alexithymia. Also, this finding was in agreement with the result of ***Peng et al., (2023)*** who performed a study about "Alexithymia in Chinese patients with chronic schizophrenia: Prevalence, clinical correlates, and relationship with neurocognition and empathy" and declared that the highest percentage of patients with schizophrenia had alexithymia. Consistently, ***Xiao et al., (2024)*** who stated that the prevalence of alexithymia in patients with schizophrenia was relatively high.

Part (III): Level of psychological resilience among the studied patients.

Concerning total level of psychological resilience among the studied patients, the present study portrayed that around three quarters of the studied patients had low level of psychological resilience. As well, less than one fifth of them had moderate level. This may be primary due to neurocognitive dysfunction decreasing the patient's response to psychosocial stress and adverse events and stress among such patients arises from many factors such as hospitalization, lack of behavioral and social skills, lack of empathy and support from surroundings, impaired interpersonal relationships, poor role functioning and stigma.

This finding was congruent with a study performed by ***Moktar et al., (2021)*** who conducted a study entitled "Relation between resilience and life satisfaction among schizophrenic patients" in Egypt and found that more than three quarters of the studied patients had low level of total resilience. This result came in agreement with study done by ***Abdel-Rahman et al., (2020)*** about "Relationship between psychological resilience and frequency of relapse and re-hospitalization in a sample of schizophrenic patients" in Egypt, who stated that, resilience was generally low in schizophrenic patients due to the severity of psychotic symptoms and stress was highly related to schizophrenia development and prognosis.

Part (IV): Level of suicidal ideation among the studied patients.

As for level of suicidal ideation among the studied patients, the result of this study demonstrated that half of the studied patients had low risk for suicidal ideation. Also, more than one quarter of them had moderate risk. While, less than one fifth of them had no risk and the minority of them had high risk for suicidal ideation. This may be due to the varying severity of schizophrenia symptoms and the effectiveness of therapeutic interventions among the studied patients. The finding that half of the patients

had low suicidal ideation risk could reflect successful management of depressive and psychotic symptoms through medication, psychotherapy, or social support. Meanwhile, the presence of moderate to high risk in a significant proportion of patients may be attributed to residual symptoms, poor medication adherence, or comorbid conditions such as depression or substance abuse.

Additionally, this event can be regarded as indicating strong, positive religious and cultural beliefs, values, customs, and traditions, as well as the existence of social support and relationships with family and friends. This finding was in harmony with a study conducted by ***Ageeb et al., (2022)*** who stidied "Relationship between emotional intelligence and suicidal ideation among schizophrenic patients" founded that most of the studied patients had low suicidal ideation.

Part (VI): Correlation between the studied variables.

Concerning correlation between alexithymia, psychological resilience and suicidal ideation among studied patients with schizophrenia, the present study highlighted that there was strong statistically significant positive correlation between suicidal ideation and alexithymia. While, there was a strong statistically significant negative correlation between alexithymia and psychological resilience. As well, there was strong statistically significant negative correlation between suicidal ideation and psychological resilience. This may be attributed to the fact that individuals with schizophrenia who exhibit higher levels of alexithymia often struggle to recognize, express, and regulate their emotions, which may contribute to an increased vulnerability to suicidal ideation. The inability to process emotional experiences effectively can heighten feelings of hopelessness and distress, making suicidal thoughts more likely.

Furthermore, patients with higher alexithymia tend to have lower coping abilities and fewer adaptive resources to manage stress, thereby reducing their psychological resilience. In turn, reduced resilience is strongly linked to higher levels of suicidal ideation, as individuals may lack the internal strength or flexibility needed to withstand psychological crises.This finding agreed with a study done by ***(Harris et al., 2020).*** who conducted a study entitled " Psychological resilience to suicidal thoughts and behaviours in people with schizophrenia, which revealed decreased levels of Psychological resilience were related to increased levels of suicidal ideation.

This finding agreed with a study done by ***Ragab & Elsayed (2021)*** who carried out a study about "The impact of alexithymia and perceived social support on suicidal probability" in Egypt, and reported that observed there is a correlation between alexithymia and suicidality, specifically suicidal ideation and attempts, and greater levels of alexithymia among suicide victims compared to non-committers. This finding agreed with a study done by ***Zarei, (2021)*** who conducted a study to investigate "The relationship between resilience and suicidal ideation" and found that suicidal ideation and resilience had a very strong negative correlation.

Conclusion

Based on the results of the present study، the following conclusion was formulated:

The present study revealed that, less than two thirds of the patients with schizophrenia tend to report high level of alexithymia and around three quarters of them had low level of psychological resilience. Also, half of the studied patients had low risk of suicidal ideation. Therefore, there was a strong statistically significant positive correlation between total suicidal ideation and alexithymia among the studied patients with schizophrenia. While, there was a strong statistically significant negative correlation between total alexithymia and psychological resilience, also between total suicidal ideation and psychological resilience among the studied patients with schizophrenia.

Recommendations

Based on the results of the present study and conclusion, the following Recommendations are suggested:

Recommendations For education (nurses, patients, families, community):

- Constructing nursing awareness programs about suicidal precautions among patients with schizophrenia.

- Psycho- educational nursing programs should be conducted to alexithymia among patient with schizophrenia.
- Enhancing psychological resilience

Recommendations for nursing practice :

- Targeting psychotherapy approaches, especially religion-based therapies as complementary therapies alongside medical treatments to improve psychological resilience.
- Design clinical intervention programs focused on enhancing emotional awareness and regulation, particularly for the patients showing high levels of alexithymia.

Recommendations for nursing research:

- Further studies are needed on large sample of patients with schizophrenia in different geographical areas to generalize the results.
- Further studies to identify factors lead to alexithymia among patients with schizophrenia.

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