# Effect of Psychological Distress on Suicide among Patients with Psychiatric Disorders

Kholoud Ali Amer<sup>1</sup>, Ikram Ibraheem Mohamed<sup>2</sup>, Safaa Mostafa Mohammed<sup>3</sup> & Mona Fawzy Hussien<sup>4</sup>

<sup>1</sup>Demonstrator of Psychiatric & Mental Health Nursing, Faculty of Nursing- Sohag University.

<sup>2</sup>Professor of Psychiatric & Mental Health Nursing, Faculty of Nursing-Assiut University.

<sup>3</sup>Assistant Professor of Psychiatric & Mental Health Nursing, Faculty of Nursing- Sohag University.

<sup>4</sup>Assistant Professor of Psychiatric & Mental Health Nursing, Faculty of Nursing - Assiut University.

Corresponding Author Email: drkholoudali88@gmail.com

Phone number: 002- 01286577624

#### Abstract

**Background**: Suicide is a mental illness that has several underlying factors. Stressful life events, ageing, sex, drug abuse and health issues are often associated with it. An increased likelihood of suicidal thoughts, plans and attempts is associated with psychological distress. **Study aims**: To evaluate the effect of psychological distress on suicide among psychiatric patients. **Research design**: A descriptive correlational research design was utilized. **Setting**: The study was carried out at Sohag Mental Health Hospital. **Sample**: A purposive sample of 400 Patients with psychiatric disorders. **Tools**: Demographic and clinical data of the patients, Kessler Psychological Distress Scale and Columbia Suicide Severity Rating Scale. **Results**: More than half (59.75%) of the studied patients are male and less than half (43.5%) of them are diagnosed with schizophrenia. Also, there is a highly statistically significant positive correlation between psychological distress and the intensity of suicidal ideation. Furthermore, there is a highly statistically significant difference in psychological distress between patients who actually attempted suicide at least once in the previous three months and those who did not; psychological distress is higher among those who attempted suicide at least once in the previous three months. **Conclusion**: Psychological distress has a significant positive effect on suicidal ideation and suicidal behavior. **Recommendations**: Developing a psycho-educational program to reduce psychological distress and help in diminishing suicidal attempts in patients with psychiatric disorders.

#### Keywords: Psychiatric disorders, Psychological distress, Suicide.

# Introduction

Psychological distress is not exactly the same as "poor mental health," but rather a more particular word that refers to the emotional pressure that is frequently connected with common mental diseases like anxiety and depression (onsaksen et al.,2021). According to the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), psychological distress is defined as "a non-specific set of symptoms ranging from anxiety and depression symptoms to functional impairment, personality features (confusing, troubling) and behavioral issues" (Belay et al.,2021).

Pereira et al., (2019) reported that, psychological distress is divided into two components or dimensions: Depression and anxiety. Anxiety is distinguished by nervousness, restlessness, trouble settling down and the inability to remain motionless. Depression is characterized by tiredness, worthlessness, hopelessness, anhedonia and the perception that everything requires a lot of effort. Women have significantly elevated levels of psychological discomfort, depression and anxiety compared to men (Twenge et al., 2019).

In this context, Condinata et al., (2021) reported another two elements influencing psychological distress: Intrapersonal and situational influences. Intrapersonal elements comprise personality characteristics that are linked to a person's distinct emotional preferences. Situational factors, which are sources of distress caused by an incident or circumstance that may endanger an individual's welldivided into three categories: Physiological, cognitive and social.

The most common causes of psychological distress among mentally ill patients are discrimination and stigma; suicidal ideation and emotions of shame and hopelessness may be amplified by discriminatory acts and social stigma (Hack et al., 2020), psychiatric medication non-adherence (Semahegn et al., 2020), adverse childhood experiences (Tzouvara et al., 2023) and financial distress (Yasmin et al., 2020).

Suicide is an avoidable worldwide health problem. It is estimated that over a million individuals die by suicide each year around the world. Surprisingly, over the past 45 years, the risk of suicide expanded by 60% (Rasnayake & Navratil, 2023). Every year, about 800,000 people worldwide kill themselves,

with one suicide taking place every 40 seconds (Mathew et al., 2021). For every completed suicide, there are an estimated 20 attempted suicides (Creel, 2021).

Suicide appears to be caused by a combination of mental disease, life events and stressful situations. However, not all suicide fatalities are related to mental health difficulties, because some people who die by suicide may not have had a mental illness or may not have sought any help (Pompili, 2022). Still, the risk of suicide associated to mental disease cannot be overlooked, and has been found to be up to eight times higher than those without mental illness; hence, treating and avoiding mental health concerns may be the first line of defense (San Too et al., 2019).

In this respect, Clapperton et al., (2019) reported that, individuals who suffer from mental health disorders are more likely to commit suicide and two distinct processes have been related to this phenomenon: The first is when life events and pressures occur prior to diagnosis, and the second is when the diagnosis was made prior to facing experiences and obstacles in life.

Suicide is tightly linked to psychological distress, which encompasses both emotional suffering and cognitive-behavioral symptoms of depression and anxiety. Perceived load appears to be a crucial factor in determining how psychological suffering can lead to suicide. Experiencing distress may drive a person to believe that their loved ones would be better off without them, prompting thoughts of suicide (Rainbow et al., 2023). Mental pain, a component of psychological distress, has been linked to suicide ideation. Individuals who have a lower capacity to bear psychological suffering are more sensitive to suicide thoughts and behavior (Klonsky & May, 2015).

According to studies, individuals suffering considerable psychological distress are more likely to think about or attempt suicide and psychological distress is a strong predictor of future suicide behavior, particularly among young adults (Ribeiro et al., 2018). In this respect, Otsuka et al., (2022) clarified that, people who experienced moderate to severe psychological distress were more likely to commit suicide. However, few studies have examined whether psychological distress levels might predict suicide death; most previous research has focused on subtypes of mental diseases.

Nurses play an important role in suicide prevention by providing patients with one-on-one care as well as the ability to evaluate and minimize suicide risk factors. Nurses have a significant role in the prevention of suicide in health teams because they handle the majority of direct patient care and have greater opportunity to cease suicide and notice the warning signs in people who demonstrate suicidal behavior (Clua-García et al., 2021). Psychiatric nurses are trained to notice warning signs of suicidal behavior, such as rapid behavioral changes, intense sadness, suicidal thoughts and attempts and so on. Early detection enables timely intervention and help (Aggarwal et al., 2023).

### Significance of the study

Suicide rates were proposed by the UN (United Nations) as a critical indicator for objective 3.4 of the Sustainable Development Goals by 2030 (Miladinov, 2023). Also, Egypt's Vision 2030 highlights the importance of mental health as a critical component of the nation's comprehensive healthcare strategy. The Vision 2030 document emphasizes the development of a comprehensive healthcare system that includes mental health services, seeking to reduce the burden of mental disorders and improve overall well-being. This approach aligns with global health strategies, such as the World Health Organization's Mental Health Action Plan 2013-2030, which advocates for integrating mental health into primary healthcare and implementing suicide prevention strategies (State Information Service, 2024).

In the Arab world, Egypt has the highest suicide rate, followed by Sudan, Yemen and Algeria (*Helali*, 2022). WHO data shows that 3022 persons committed suicide in Egypt in 2019, compared to 7881 suicides in Egypt alone in 2022 (*Farahat et al.*, 2022).

The majority of suicides and suicide attempts are caused by psychiatric illnesses; these rates are at least ten times higher than those in the general population. In this setting, the reported percentage of completed suicides varies from 60% to 98% of all suicides. Many of the remaining episodes have to do with interpersonal issues, financial difficulties and the crises that follow (Bachmann, 2018).

One avoidable but wildly unpredictable health behavior is suicide and given the widespread media attention and public concern worldwide, particularly in emerging nations. Understanding how psychological distress affect suicide among patients with psychiatric disorders is crucial in this regard, as it may aid in the development and application of successful plans to manage and prevent psychiatric patient suicide.

## Aim of the study

To evaluate the effect of psychological distress on suicide among psychiatric patients.

## **Research question**

Does the psychological distress have an effect on suicide among psychiatric patients?

# Subjects and method Research design

A descriptive correlational research design was used in this study.

## Setting

The current study was conducted at Sohag Mental Health Hospital (inpatient and outpatient clinics), which is affiliated with the General Secretariate for Mental Health, Ministry of Health. It has four units including a male unit, a female unit, an addiction unit and an emergency unit. The hospital has a capacity of 100 beds. It also has an outpatient clinic that operates daily. The hospital provide care for patient diagnosed with acute and chronic mental illnesses requiring institutional care.

### Sample size

The sample size was calculated according to the software EPI/Info for determination of the sample size. The total number of patients was 330640 according to the admission office at Sohag Mental Health Hospital from July 2022 to June 2023, 640 patients were admitted to inpatient clinics, while 330000 patients were admitted to outpatient clinics. By using the software EPI/Info, version 3,3 with 95% confidence interval (CI), the estimated sample size was found to be 384 patients. To compensate for the dropout (3%) was added to the sample size and the final sample size was 400 patients.

The sample type: 400 mentally ill patients were selected as a purposive sample from the previously mentioned setting based on the following standards:

#### **Inclusion criteria**

- 1. Patients who agree to participate in the study.
- 2. Patients willing to participate.

## **Exclusion criteria**

- 1. Patients diagnosed with organic brain disorders.
- 2. Addict patients.
- 3. Patients whose age less than 20.

## **Data collection tools**

Three tools were used in the data collection as follow:

**Tool (1): Demographic and clinical characteristics of the patients:** This tool was created by the researcher in Arabic language, it was divided into two parts:

**Part I:** Demographic data as, gender, marital status, current employment status and residence.

**Part II:** Clinical characteristics as patient diagnosis, onset of symptoms and previous hospitalization.

Tool (II): Kessler Psychological Distress Scale (K10): Kessler Psychological Distress Scale was created in the English language by (Kessler et al., 2002) and translated into the Arabic language by (Ahmed et al., 2023). It consists of ten items with five Likert scale responses (1-5) fi=or each item. The psychological distress is assessed based on the amount of anxiety and despair that has occurred recently. The overall score is in the range of 10 to 50. The cut-off scores provided by Andrews and Slade (18) to gauge the degree of psychological distress were as follows: A score of 10 to 15 indicates "low distress," 16 to 21 indicates "moderate," 22 to 29 indicates "high" and 30 to 50 indicates "very high." The obtained Cronbach's Alpha value confirmed a good level of internal consistency (0.91) by (Ahmed et al., 2023).

Tool (III): Columbia suicide severity rating scale (C-SSRS): The C-SSRS is a semi-structured interview that assesses suicidal behaviors. The scale is used to assess suicidal ideation during the previous 30 days and suicidal behavior over the previous three months. Four distinct constructs were evaluated. A 5-point ordinal scale is used to rate the first factor, the severity of suicidal ideation. The second subscale is the intensity of suicidal ideation, which has five items with a 5-point ordinal rating system for the most severe type of ideation. The third subscale is behavior, which is scored on a nominal scale that includes actual suicide attempts, attempts aborted attempts interrupted preparatory behavior. The fourth subscale, called "lethality," evaluates actual attempts; actual lethality is rated on a 5-point ordinal scale and a 3-point ordinal rating to potential lethality of attempts if actual lethality is zero (Posner et al., 2011).

# Levels of intensity of suicidal ideation are classified as follows:

- 6 to 10 =moderate intensity of ideation level.
- 11 to 15 = moderate to severe intensity of ideation level.
  - 16 to 20 = severe intensity of ideation
  - 21 to 25= very severe intensity of ideation level.

## Method

## Administrative approval

An official approval letter from the dean of the faculty of nursing at Sohag University was obtained to obtain approval for data collection from the director of Sohag Mental Health Hospital. After the study protocol and tools were revised, an official approval was obtained from the research committee of the General Secretariat of Mental Health in Egypt

and then from the director of the psychiatric mental health hospital.

## **Tools validity**

The content validity was determined by a panel of five experts, including faculty members in the nursing and medical fields from Assiut University, who examined the data collection tools for clarity, relevance, comprehensiveness and applicability. Based on their opinions, the final version was developed and modifications were made.

## Pilot study

A pilot study was carried out on 10% (40) of the patients before data collection to evaluate the tools' clarity, consistency and feasibility and estimate the time required to complete them. The tools were not modified. Thus, the pilot study patients were included in the total sample of the study.

# Tools reliability

The study tool, after being translated into Arabic, was tested for their internal consistency by Cronbach Alpha. Cronbach Alpha for Columbia suicide severity rating scale was (0.952).

#### **Fieldwork**

The actual fieldwork for the data-gathering process took place three days per week for five months started in January 2024 and ending in May 2024. Six to eight patients were interviewed daily through the following:

- 1- The researcher presented herself to the patients who fulfilled the requirements for participation in the study and approved to participate.
- 2- The patients were given a brief explanation of the study goals before data collection.
- 3- In the waiting room, every patient was evaluated and interviewed separately.
- 4- Under the researcher's supervision, each patient handled the questionnaire and completed it. The researcher assisted patients who had difficulties with reading in recording their responses.
- 5- Tools of the study took an average of 20 to 25 minutes to be filled.
- 6- The researcher thanked the patients for taking part in the study.

# **Ethical consideration**

The research proposal was approved by the Faculty of Nursing ethical committee at Assiut University on 27 November 2023 with ID approval (1120230712). During the application process, the study participants were not at risk. The privacy and confidentiality of the information gathered were

confirmed by the researcher. Also, the researcher explained the purpose of study to patients and notified them that they have the right to discontinue their participation in the study at any time. Before the study, the researcher obtained oral or written consent from patients after an explanation of the study's aim.

### Statistical analysis

After finishing data collection, the Statistical Package of Social Science (SPSS) version 22 was used to arrange, tabulate and statistically analyze the data. Data were shown as mean, standard deviation, frequency and percentage. When comparing quantitative variables between two groups, the independent sample t-test was employed. Pearson correlation was used to correlate quantitative variables and the following degree of significance was determined: P-value  $\leq 0.01$  indicated a highly statistically significant difference, P-value  $\leq 0.05$  indicated a statistically significant difference

#### **Results**

**Figure (1)** illustrates that, more than two-fifth (44%) of the studied patients their ages range from 20-<30. It was noticed that, more than half (59.75%) of the studied patients are males, as clarified in **figure (2)**.

**Figure (3)** presents that, slightly less than half (48%) of the studied patients are married.

Also, the current study demonstrates that, more than two-fifths (41.75%) of the studied patients are housewives or unemployed and more than half (58%) of them reside in rural areas as shown in **figures (4 & 5)**, respectively.

**Table (1)** shows that, more than two-fifths of the studied patients are diagnosed with schizophrenia and their onset of symptoms is 2-3 years. Also, 70.5% of the studied patients have been previously hospitalized.

**Table (2)** clarifies that, 38% and 38.5% of the studied patients feel tired out for no good reason and feel nervous all of the time, respectively. Also, it is found that, 45.25% and 43.5% of them feel restless or fidgety and feel worthless all of the time, respectively. Moreover, 50% of them reported they feel that everything was an effort all of the time. The mean score of psychological distress among studied patients is  $(39.41 \pm 10.28)$ , which indicates that, patients experience very high level of psychological distress.

**Figure (6)** illustrates that, the majority 89.5% of psychiatric patients experience very high level of psychological distress.

**Table (3)** reveals that, more than three-quarter (79%) of the studied patients wished they were dead or wished they could go to sleep and not wake up

over the past thirty days. Also, it was found that, less than two-thirds (63.25%) of them have thoughts of killing themselves over the past thirty days and more than two-fifth (44.25%) of them have been thinking about how they might do this over the past thirty days. Moreover, it is found that, more than two-fifth (45.25% and 44.25%) of them have suicidal thoughts and some intention of acting on them and have started to work out or worked out the details of how to kill themselves and intended to carry out this plan over the past thirty days, respectively. Furthermore, it is found that, more than three-quarter (80%) of the studied patients have suicidal ideation.

Fig. (7) illustrates that, more than two-fifth (44.4%) of the studied patients have a severe intensity of suicidal ideation level.

-It was noticed that, about one-quarter of the studied patients have a history of actual suicide attempts in the past 3 months as shown in **table (4)**. Regarding the actual lethality/ medical damage, the results clarify that, all of the participants with a history of actual suicide attempts have either no physical damage at all or minor physical damage. Concerning potential lethality, less than two-thirds of the patients

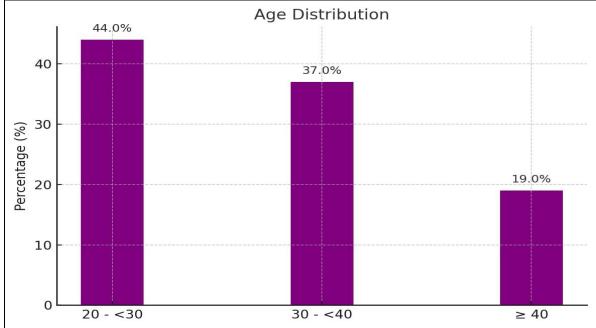
who have no or very minor physical damage as a result of their actual suicide attempts, their behavior was likely to result in death despite available medical care.

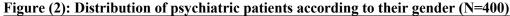
**Fig. (8)** reveals a highly statistically significant positive correlation between psychological distress and intensity of suicidal ideation among the studied patients (r=0.219, p=0.000\*\*).

**Table (5)** demonstrates the relationship between psychological distress and actual attempts of suicide among psychiatric patients. There is a highly statistically significant difference between patients who actually attempted suicide at least once in the previous three months and those who did not regarding psychological distress; psychological distress is higher among patients who attempted suicide at least once in the previous three months  $(p=0.001^*)$ .

### Results

Figure (1): Distribution of studied patients according to their age in year (N=400).





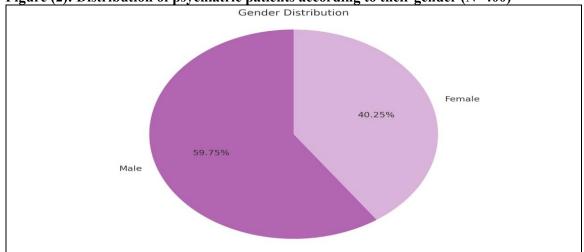
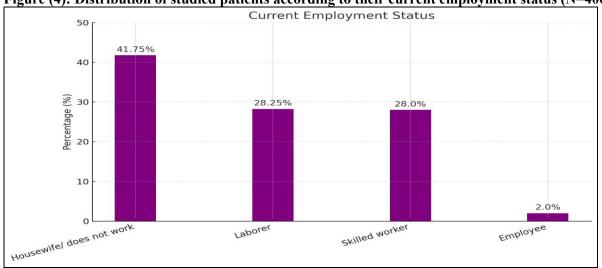


Figure (3): Distribution of studied patients according to their marital status (N=400)



Figure (4): Distribution of studied patients according to their current employment status (N=400)





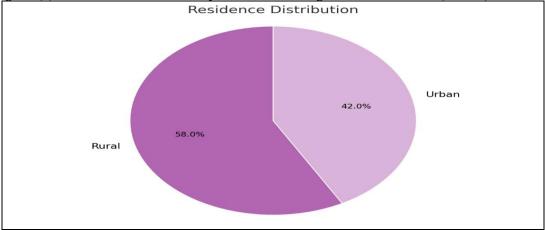


Table (1): Distribution of studied patients according to their clinical characteristics (N=400)

Clinical data	No. (400)	%
Patient diagnosis:		
Schizophrenia	174	43.5%
Bipolar disorder (mania, depression)	87	21.75%
Schizoaffective	64	16.0%
Major depression	60	15.0%
Obsessive-compulsive disorder	9	2.25%
Generalized anxiety disorder	6	1.5%
Onset of symptoms: (years)		
< 2	101	25.25%
2 - 3	163	40.75%
> 3	136	34.0%
Previous hospitalization:		
Yes	282	70.5%
No	118	29.5%

Table (2): Frequency distribution of psychological distress scale items among studied patients (N=400).

		of the		e of the		e of the		t of the	All of	the time
In the past 30 days	time		time		time		time			
	No.	%	No.	%	No.	%	No.	%	No.	%
About how often did you feel tired for no good reason?	39	9.75	10	2.5	77	19.25	122	30.5	152	38.0
About how often did you feel nervous?	23	5.8	6	1.5	62	15.5	155	38.8	154	38.5
About how often did you feel so nervous that nothing could calm you?	27	6.75	24	6.0	68	17.0	138	34.5	143	35.75
About how often did you feel hopeless?	26	6.5	5	1.25	76	19.0	130	32.5	163	40.75
About how often did you feel restless or fidgety?	24	6.0	4	1.0	73	18.25	118	29.5	181	45.25
About how often did you feel so restless you could not sit still?	23	5.75	4	1.0	70	17.5	117	29.25	186	46.5
About how often did you feel depressed?	30	7.5	8	2.0	92	23.0	127	31.75	143	35.75
About how often did you feel that everything was an effort?	28	7.0	4	1.0	56	14.0	112	28.0	200	50.0
About how often did you feel so sad that nothing could cheer you up?	27	6.75	6	1.5	116	29.0	102	25.5	149	37.25
About how often did you feel worthless?	60	15.0	29	7.25	69	17.25	68	17.0	174	43.5
Mean ± SD	$39.41 \pm 10.28 \ (10.0 - 50.0)$									

Figure (6): Frequency distribution of studied patients according to their level of psychological distress (N=400):

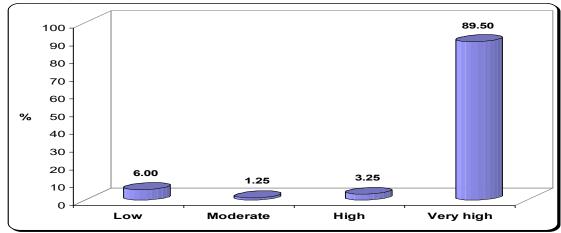


Table (3): Frequency distribution of suicidal ideation subscale among psychiatric patients (N=400)

In the past 30 days		Yes		No		
In the past 50 days	No.	%	No.	%		
1-Have you wished you were dead or wished you could go to sleep and not	316	79.0%	84	21.0%		
wake up?						
2-Have you actually had any thoughts of killing yourself?	253	63.25%	147	36.8%		
3- Have you been thinking about how you might do this?	177	44.25%	76	19%		
4-Have you had these thoughts and have some intention of acting on them?	181	45.25%	72	18%		
5-Have you started to work out or worked out the details of how to kill	177	44.25%	76	19%		
yourself? Do you intended to carry out this plan?						
-Total percent of suicidal ideation	320	80%	80	20%		

Figure (7): Frequency distribution of psychiatric patients according to their intensity of suicidal ideation levels (N=320).

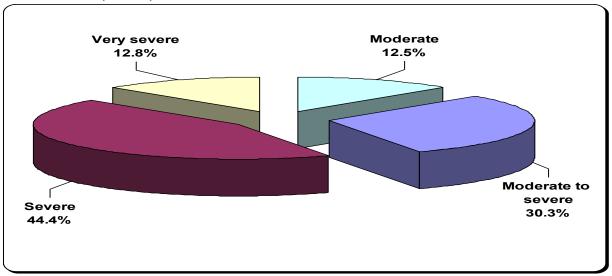


Table (4): Distribution of suicidal behavior among studied patients (N=400):

In the past three months	No. (400)	%
Actual attempt:		
Yes	102	25.5%
No	298	74.5%
Interrupted attempt:		
Yes	76	19.0%
No	324	81.0%
Aborted or self-interrupted attempt:		
Yes	63	15.75%
No	337	84.25%
Preparatory acts or behavior:		
Yes	181	45.25%
No	219	54.75%
Actual lethality/ medical damage: No. (102)		
No physical damage or very minor physical damage	37	36.3%
Minor physical damage	65	63.7%
Potential lethality: No. (37)	<del>.</del>	
Behavior that is not likely to result in injury	0	0.0%
Behavior likely to result in damage but not likely to cause death	13	35.1%
Behavior likely to result in death despite available medical care	24	64.9%

Figure (8): Correlation between psychological distress and intensity of suicidal ideation

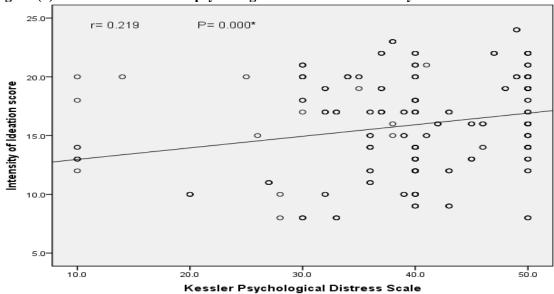


Table (5): Relationship between psychological distress and actual attempts of suicide

Variable	Actual attempt of suicide		t-value	p- value
	Yes	no		
Psychological distress Mean ± SD	42.22 ± 8.70	38.45 ± 10.61	-3.229	0.001*

<sup>\*</sup> Highly Statistically significant difference (P-value < 0.01).

#### **Discussion**

Features of psychological distress, including tension, anxiousness, depression and feeling isolated, are becoming more widely acknowledged as serious public health issues (Alhomsi et al., 2023). Suicidal behavior is strongly associated with psychological distress in a variety of populations, with particular symptoms such as anxiety and depression being important contributors (Tang et al., 2018).

The present study showed that more than two-fifths of the studied patients had schizophrenia. It may be attributed to that, people with schizophrenia usually have more severe symptoms than people with other mental illnesses and because of their frequent episodes of psychosis, they may need to be admitted to the hospital or visit medical facilities more frequently. This finding is in line with **Okasha et al.**, (2021) who reported that more than two-fifths of study participants had schizophrenia. Also, **Boldrini et al.**, (2021) reported that less than two-fifths of the studied patients had schizophrenia. However, this result is in contrast with the study done by **Crellin et al.**, (2022) who reported that less than three-quarters of the patients had schizophrenia.

Concerning the onset of symptoms, more than two-fifths of the studied patients their symptoms started from 2-3 years. From the researcher's point of view, the bulk of the patients in the study were young and the symptoms had just been started with them. This finding is supported with **Bifftu et al.**, (2021) who reported that more than two-fifths of patients had their symptom onset between 2–3 years. However, this finding is contrary to **Lähteenvuo et al.**, (2021) who reported that, slightly less than two-fifths of the studied patients had the onset of their symptoms more than 3 years.

According to the previous hospitalization, more than two-thirds of the studied patients had previously been admitted to psychiatric hospitals. It may be attributed to, the severity of their symptoms and the chronic nature of their mental illness. Also, some individuals may not adhering to their medications as prescribed. This finding is supported by Hamza et al., (2022) who reported that less than three-quarters of the patients had previously been admitted to psychiatric hospitals. While, this result is in disagreement with the study done by Farouk & Berma, (2024) who reported that only less than one-thirds of the patients had previously been admitted to psychiatric hospitals.

Regarding psychological distress, the findings of the study indicated that, less than two-fifths of the studied patients were nervous and more than one-third of them were depressed all of the time. This may be related to that, unemployment and the inability to meet basic necessities or an intolerance for living expenses can all worsen a patient's underlying mental health disorders,

such as anxiety and depression. This finding is in agreement with **Barros et al., (2020)** who reported that, more than two-fifths of study participants were nervous and more than one-third of them were depressed all of the time.

As regard, levels of psychological distress, the current study revealed that, the majority of the studied patients have very high levels of psychological distress. This could be explained by the fact that, the higher amplitude of psychological distress in this study is due to the nature of the psychiatric condition, which generates emotional and psychological distress. Furthermore, mental patients frequently encounter social stigma, discrimination and financial difficulty. all of which contribute to their psychological burden, resulting in extremely high levels of psychological distress. Conversely, this finding is in disagreement with Jung et al., (2024) who reported that a total of less than one-tenth of the study participants had serious psychological distress (SPD) and Antunes et al., (2017) who revealed that among the participants who reported not having enough money, less than onequarter of participants reported psychological distress. This could be related to cultural differences or research methodology.

Regarding the suicidal ideation, more than threequarters of the studied patients had suicidal ideation. It might be attributed to the fact that this study was conducted in a mental health population experiencing exceptionally high levels of psychological distress. Additionally, the majority of the individuals studied with schizophrenia and mood disorders were at risk of suicidal ideation due to the nature of their illnesses. In line with this finding, De Beurs et al., (2019) reported that, more than three-quarters of participants had suicidal ideation and Mohammed et al., (2024) revealed that, two-thirds of the participants had suicidal ideation. Conversely, this finding is in disagreement with the study conducted by Bala &Jahan, (2009), who reported that less than one-fifth of the psychiatric patients had suicidal thoughts.

As regards, intensity of suicidal ideation, this study indicated that, more than half of the studied patients had severe to very severe suicidal ideation levels. It may be related to, the complex interaction of underlying mental health conditions, particularly schizophrenia and mood disorders, with social and environmental circumstances, such as trauma, a lack of social support, financial difficulties, unemployment and debt, all of which can have part in raising intensity of suicidal ideation.

Concerning the suicidal behavior, the current study showed that one-quarter of the studied patients had at least one actual attempt of suicide in the past 3 months. It could be due to the fact that this study targets a high-risk population; people with mental

diseases such as severe depressive disorder, schizophrenia and bipolar disorder. Extreme grief, hopelessness, a distorted perception of reality, social rejection and loneliness are all possible effects of these situations, which may coincide with financial troubles, unemployment and insufficient monthly income, all of which might raise the risk of suicide.

This result agrees with Jongkind et al., (2024) who reported that, more than a quarter of the study participants had practiced suicide attempts. Also, this study is consistent with Getahun et al., (2023) who reported that, the prevalence of suicide attempts among study participants was less than one-quarter. However, this finding is in contrast with Boğan et al., (2024) who reported that prevalence of suicide attempts among study participants was more than twofifths and Mohammed et al., (2024) who reported that, the prevalence of suicide attempts among studied psychiatric patients was more than half, it may be attributed to that, many of them had recurrent comorbidities episodes, and treatment-resistant conditions.

According to, the actual death/ medical damage, the results showed that, all of the participants with a history of previous suicidal attempts had either no physical damage at all or minor physical damage. It could be explained by the fact that suicidal behaviors were evaluated over a three-month period, which is insufficient for dealing with suicide attempts, which require long-term treatment. Critical instances involving moderate to severe bodily injury would be treated in the general hospital. Also, this could be related to the fact that patients may need to grasp attention and assistance of others but not intended to die. This finding is in consistent with the study conducted by Hasan et al., (2024) who reported that, most of the participants with a history of previous suicidal attempts had either no physical damage at all or very minor physical damage.

According to the correlation between psychological distress and intensity of suicidal ideation. The current study revealed that, there was a highly statistically significant positive correlation between psychological distress and intensity of suicidal ideation. This indicates that, psychological distress has a major influence on the intensity of suicidal ideation. This could be attributed to the fact that psychological distress, including symptoms such as anxiety, depression and hopelessness, can lead an individual to believe that nothing will improve and that suicide is the only way to end their suffering, increasing the intensity of suicidal ideation.

This finding agrees with Shongwe & Huang, (2021) & Czeisler et al., (2021), who reported a significant positive correlation between psychological distress and intensity of suicidal ideation. Also, Campos et al.,

(2017) who reported a significant positive correlation between psychological distress and intensity of suicidal ideation and that, mental pain fully or substantially explains the process that links the frequency and intensity of psychological distress to suicidal ideation, indicating that mental pain is a possible target for intervention.

According to the relationship between psychological distress and actual attempt of suicide, the present study showed that, there is a highly statistically significant difference in psychological distress between patients who actually attempted suicide at least once in the previous three months and those who did not; psychological distress is higher among those who attempted suicide at least once in the previous three months. This reveals that, psychological distress has a significant effect on suicidal attempts. This could be related to the fact that psychological distress frequently includes feelings of sadness, anxiety, guilt and depression, which significantly impair emotional, cognitive and behavioral performance, increasing the risk of suicidal behavior, with factors such as anxiety sensitivity, emotion dysregulation and perceived burdensomeness playing important roles in this relationship.

This result is supported by Tang et al., (2018), Eskin et al., (2016) & McMillan et al., (2010) who reported that, there is a correlation between psychological distress and suicidal behavior. Also, Tanji et al., (2018) reported that not only severe but also moderate psychological distress was associated with increased risk of suicidal behavior. However, this finding in contrast with the study conducted by Rubio et al., (2020) who reported that no direct relationship was observed between psychological distress and suicidal attempts. Suggests that other mediators/moderators (e.g., social support, coping style) may play a larger role.

## Conclusion

It can be concluded from the current study's findings that:

- There is a highly statistically significant positive correlation between psychological distress and intensity of suicidal ideation. This reveals that, psychological distress has a significant effect on the intensity of suicidal ideation.
- There is a highly statistically significant difference in psychological distress between patients who actually attempted suicide at least once in the previous three months and those who did not; psychological distress is higher among those who attempted suicide at least once in the previous three months. This indicates that, psychological distress has a significant effect on suicidal behavior.

#### Recommendations

- 1- Developing psycho-educational program for patients to alleviate psychological distress, such as stress management programs.
- 2- Investigate factors that mitigate or moderate the association between psychological distress and suicide among patients, such as social support, coping mechanism and access to mental health services.
- 3- Promote the adoption of lifestyle changes, such as better sleep, hygiene, physical activity and diet as a part of distress management.

### References

- 1. Aggarwal, R., Cowley, D., Tang, J., Lundquist, R., Wolf, K., & Walaszek, A. (2023). Understanding the training of psychiatric mental health nurse practitioners. *Academic Psychiatry*, 47(3), 304-308.
- Ahmed, A., Mekhemar, E., Mohamed, I., Elserogy, Y., El-Aziz, A., & Mohamed, A. (2023). Correlation between psychological distress and academic self-efficacy of Assiut University students. Assiut Scientific Nursing Journal, 11(38), 79-87.
- 3. Alhomsi, A., Strassle, P., Ponce, S., Mendez, I., Quintero, S., Wilkerson, M., & Napoles, A. (2023). Financial hardship and psychological distress during the pandemic: A nationally representative survey of major racial-ethnic groups in the United States. *Health Equity*, 7(1), 395-405.
- 4. Antunes, A., Frasquilho, D., Silva, M., Cardoso, G., & Caldas-de-Almeida, J. (2017). Financial difficulties, economic hardship and psychological distress during the economic recession in Portugal. *European Psychiatry*, 41(S1), S567–S568.
- **5. Bachmann, S. (2018).** Epidemiology of suicide and the psychiatric perspective. *International journal of environmental research and public health, 15(7),* 1425.
- 6. Bala, R., & Jahan, M. (2009). Prevalence of suicidal ideation in hospitalized psychiatric patients. Eastern Journal of Psychiatry, 12(1-2), 45-48
- 7. Barros, M., Lima, M., Malta, D., Szwarcwald, C., Azevedo, R., Romero, D., & Gracie, R. (2020). Report on sadness/depression, nervousness/anxiety and sleep problems in the Brazilian adult population during the COVID-19 pandemic. *Epidemiologia e Serviços de Saúde, 29*, e2020427.
- 8. Belay, S., Guangul, M., Asmare, N., & Mesafint, G. (2021). Prevalence and associated factors of psychological distress among nurses in public hospitals, Southwest, Ethiopia: A cross-sectional study. Ethiopian Journal of Health Sciences, 31(6).

- 9. **Bifftu, B., Tiruneh, B., Dachew, B., & Guracho,** Y.. (2021). Prevalence of suicidal ideation and attempted suicide in the general population of Ethiopia: a systematic review and meta-analysis. *International journal of mental health systems, 15,* 1-12
- 10. Boğan, M., Bekircan, E., Boğan, F., Kara, N., & Kara, A. (2024). Retrospective study on suicide attempts among psychiatric emergencies admitted to the emergency department of a Regional hospital in Turkey. *Current Psychology*, 43(32), 26503-26510.
- 11. Boldrini, T., Girardi, P., Clerici, M., Conca, A., Creati, C., Di Cicilia, G., & Lingiardi, V. (2021). Consequences of the COVID-19 pandemic on admissions to general hospital psychiatric wards in Italy: reduced psychiatric hospitalizations and increased suicidality. Progress in Neuro-Psychopharmacology and Biological Psychiatry, 110, 110304.
- 12. Campos, R., Gomes, M., Holden, R., Piteira, M., & Rainha, A. (2017). Does psychache mediate the relationship between general distress and suicide ideation?. *Death studies*, 41(4), 241-245.
- 13. Clapperton, A., Newstead, S., Frew, C., Bugeja, L., & Pirkis, J. (2019). Pathways to suicide among people with a diagnosed mental illness in Victoria, Australia. *Crisis*, 41(2), 105-113.
- **14. Clua-García, R., Casanova-Garrigós, G., & Moreno-Poyato, A. (2021).** Suicide care from the nursing perspective: A meta-synthesis of qualitative studies. *Journal of advanced nursing,* 77(7), 2995-3007.
- 15. Condinata, F., Satiadarma, M., & Suyasa, P. (2021, December). Psychological distress among emerging adults: A descriptive study. In 1st Tarumanagara International Conference on Medicine and Health (TICMIH 2021) (pp. 195-198). Atlantis Press.
- **16. Creel, S. (2021).** Prison and Suicide: The Implementation of Suicide Prevention Policies into Prisons (Master's thesis, University of West Georgia). ProQuest Dissertations Publishing.
- 17. Crellin, N., Priebe, S., Morant, N., Lewis, G., Freemantle, N., Johnson, S., ... & Moncrieff, J. (2022). An analysis of views about supported reduction or discontinuation of antipsychotic treatment among people with schizophrenia and other psychotic disorders. *BMC psychiatry*, 22(1), 185.
- 18. Czeisler, M., Drane, A., Winnay, S., Capodilupo, E., Czeisler, C., Rajaratnam, S. M., & Howard, M. (2021). Mental health, substance use, and suicidal ideation among unpaid caregivers of adults in the United States during the COVID-19 pandemic: Relationships to age, race/ethnicity,

- employment, and caregiver intensity. *Journal of affective disorders*, 295, 1259-1268.
- Eskin, M., Sun, J. M., Abuidhail, J., Yoshimasu, K., Kujan, O., Janghorbani, M., ... & Voracek, M. (2016). Suicidal behavior and psychological distress in university students: a 12-nation study. Archives of suicide research, 20(3), 369-388.
- 20. Farahat, R., Shaheen, N., & Abdelazeem, B. (2022). Suicide in Egypt: Should it Be prevented or disregarded?. *Annals of medicine and surgery* (2012), 81, 104496.
- 21. Farouk, N., & Berma, A. (2024). The Relationship between Social Support and Recovery Levels among Patients with Psychatric Disorders. Port Said Scientific Journal of Nursing, 11(2), 145-173.
- 22. Getahun, G., Gebremariam, Z., Haile, K., & Worku, A. (2023). Prevalence and associated determinants of suicidal ideation and attempt among people with severe mental disorders in Addis Ababa, Ethiopia a cross-sectional study. *Preventive Medicine Reports*, 35, 102335.
- 23. Hack, S., Muralidharan, A., Brown, C., Drapalski, A., & Lucksted, A. (2020). Stigma and discrimination as correlates of mental health treatment engagement among adults with serious mental illness. *Psychiatric Rehabilitation Journal*, 43(2), 106.
- 24. Hamza, H. Berma, A., & El-said, S. (2022). Perceived Social Support and Its Effect On Psychiatric Patients' Recovery. *Tanta Scientific Nursing Journal*, 26(3), 65-81.
- 25. Hasan, H., Rizk, E., Omar, A., Awaad, M., Hashem, R., & Mohamed, M. (2024). Personality disorders among a sample of Egyptian patients with major depressive disorder and their association with suicide. *Middle East Current Psychiatry*, 31(1), 46.
- **26. Helali, S. (2022, March 15).** About the phenomenon of suicide in Egypt. Egyptian Institute for Studies. Retrieved October16,2023, fromhttps://en.eipss-eg.org/about-the-phenomenon-of-suicide- in-egypt/
- 27. Jongkind, M., Braam, A. W., van den Brink, B., & Shea, S. (2024). Extent and Intensity of Suicidal Ideation and Planning in Patients Presenting With Psychiatric Emergencies. *Chronic Stress*, 8, 24705470241254616.
- **28. Jung, J., Mukherjee, K., Brown, M., & Sadigh, G. (2024).** Association between financial hardship and psychological burden and the role of social and mental health support: An observational study. *Medicine*, 103(28), e38871.
- 29. Kessler, R., Andrews, G., Colpe, L., Hiripi, E., Mroczek, D., Normand, S. & Zaslavsky, A. (2002). Short screening scales to monitor

- population prevalences and trends in non-specific psychological distress. *Psychological medicine*, 32(6), 959-976.
- **30. Klonsky, E., & May, A. (2015).** The three-step theory (3ST): A new theory of suicide rooted in the "ideation-to-action" framework. *International Journal of Cognitive Therapy*, 8(2), 114-129.
- 31. Lähteenvuo, M., Batalla, A., Luykx, J. J., Mittendorfer-Rutz, E., Tanskanen, A., Tiihonen, J., & Taipale, H. (2021). Morbidity and mortality in schizophrenia with comorbid substance use disorders. *Acta Psychiatrica Scandinavica*, 144(1), 42-49.
- **32. Mathew, A., Saradamma, R., Krishnapillai, V.,** & Muthubeevi, S. B. (2021). Exploring the family factors associated with suicide attempts among adolescents and young adults: a qualitative study. *Indian journal of psychological medicine, 43(2),* 113-118.
- 33. McMillan, K., Enns, M., Asmundson, G., & Sareen, J. (2010). The association between income and distress, mental disorders, and suicidal ideation and attempts: findings from the Collaborative Psychiatric Epidemiology Surveys. The Journal of clinical psychiatry, 71(9), 1497.
- **34. Miladinov, G. (2023).** The Economics of Suicide: Evidence from LMICs and HICs. *Journal of Research in Social Science and Humanities*, *2*(6), 9-25.
- 35. Mohammed, A., Menna, T., Ayalew, M., Teshome, T., Alayu, M., & Tesfay, N. (2024). Prevalence and factors associated with suicidal ideation and attempts among mentally ill patients in the psychiatry OPD at St. Paul's Hospital Millennium Medical College, Addis Ababa, Ethiopia. Frontiers in child and adolescent psychiatry, 3, 1342257.
- 36. Okasha, T., Sabry, W., Zaki, N., Rabie, M. & Elhawary, Y. (2021). Characteristics and outcomes of patients admitted to the first psychiatric intensive care unit in Egypt. South African Journal of Psychiatry, 27, a1642.
- **37.** Onsaksen, T., Nerdrum, P., & Østertun Geirdal, A. (2021). Psychological distress and its associations with psychosocial work environment factors in four professional groups: A cross-sectional study. *Nursing & Health Sciences*, 23(3), 698-707.
- **38. Otsuka, T., Sugawara, Y., Matsuyama, S., & Tsuji, I.** (2022). How does social support modify the association between psychological distress and risk of suicide death?. *Depression and anxiety,* 39(8-9), 614-623.
- 39. Pereira, A., Oliveira, C., Bártolo, A., Monteiro, S., Vagos, P., & Jardim, J. (2019). Confiabilidade

- e estrutura fatorial da Escala de Distress Psicológico de Kessler de 10 itens (K10) entre adultos portugueses. Ciência & Saúde Coletiva, 24, 729-736.
- **40. Pompili, M. Ed. (2022).** Suicide Risk Assessment and Prevention. Springer Nature. https://doi.org/10.1007/978-3-030-42003-1
- 41. Posner, K., Brown, G., Stanley, B., Brent, D., Yershova, K., Oquendo, M., & Mann, J. (2011). The Columbia–Suicide Severity Rating Scale: initial validity and internal consistency findings from three multisite studies with adolescents and adults. *American journal of psychiatry*, 168(12), 1266-1277.
- 42. Rainbow, C., Baldwin, P., Hosking, W., Gill, P., Blashki, G., & Shand, F. (2023). Psychological distress and suicidal ideation in Australian online help-seekers: The mediating role of perceived burdensomeness. *Archives of suicide research*, 27(2), 439-452.
- **43. Rasnayake, S., & Navratil, P. (2023).** Warning Signs of Elderly Suicide and Factors Affecting Professional Help-Seeking: Case of Sri Lanka. *Journal of Population & Social Studies, 31.*
- **44. Ribeiro, J., Huang, X., Fox, K, & Franklin, J. (2018).** Depression and hopelessness as risk factors for suicide ideation, attempts and death: meta-analysis of longitudinal studies. *The British Journal of Psychiatry*, *212*(5), 279-286.
- 45. Rubio, A., Oyanedel, J., Cancino, F., Benavente, L., Céspedes, C., Zisis, C., & Páez, D. (2020). Social support and substance use as moderators of the relationship between depressive symptoms and suicidal ideation in adolescents. Frontiers in Psychology, 11, Article 539165.
- 46. San Too, L., Spittal, M. J., Bugeja, L., Reifels, L., Butterworth, P., & Pirkis, J. (2019). The association between mental disorders and suicide: a systematic review and meta-analysis of record linkage studies. Journal of affective disorders, 259, 302-313.
- 47. Semahegn, A., Torpey, K., Manu, A., Assefa, N., Tesfaye, G., & Ankomah, A. (2020). Psychotropic medication non-adherence and its associated factors among patients with major psychiatric disorders: a systematic review and meta-analysis. Systematic reviews, 9, 1-18.

- **48. Shongwe, M. C., & Huang, S. L. (2021).** Suicidal ideation and predictors of psychological distress during the COVID-19 pandemic in Eswatini: a population-based household telephone survey. *International journal of environmental research and public health, 18*(13), 6700.
- 49. State Information Service. (2024, September 6).

  Ministry of Health lunches the presidential initiative to support mental health, "Your Health is Happiness."

  https://sis.gov.eg/story/197988/Ministry-of-Health-launches-the-presidential-intiative-to-supportmental-health%2c-%27Your-Health-is Happiness%E2%80%99?lang=en-us
- 50. Tang, F., Byrne, M., & Qin, P. (2018). Psychological distress and risk for suicidal behavior among university students in contemporary China. *Journal of affective disorders*, 228, 101-108.
- 51. Tanji, F., Tomata, Y., Zhang, S., Otsuka, T., & Tsuji, I. (2018). Psychological distress and completed suicide in Japan: A comparison of the impact of moderate and severe psychological distress. *Preventive Medicine*, 116, 99–103.
- **52.** Twenge, J., Cooper, A., Joiner, T., Duffy, M., & Binau, S. (2019). Age, period, and cohort trends in mood disorder indicators and suicide-related outcomes in a nationally representative dataset, 2005–2017. Journal of abnormal psychology, 128(3), 185.
- 53. Tzouvara, V., Kupdere, P., Wilson, K., Matthews, L., Simpson, A., & Foye, U. (2023). Adverse childhood experiences, mental health, and social functioning: A scoping review of the literature. Child Abuse & Neglect, 139, 106092.
- 54. Yasmin, H., Khalil, S. & Mazhar, R. (2020). COVID 19: Stress management among students and its impact on their effective learning. *International Technology and Education Journal*, 4(2), 65-74.