

## Suicidal Behaviors and Psychological Distress Among Suicidal Persons in Poisoning Treatment and Toxicology Research Unit at Benha City

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### Abstract

**Background:** Suicidal behavior is seen as a major public health issue, which is the most extreme behavioral expression of psychological distress. **Aim:** Determine suicidal behaviors and psychological distress among suicidal persons. **Design:** The study's aim was accomplished through the use of a descriptive correlational design. **Setting:** This investigation was carried out at Benha University Hospital's Poisoning Treatment and Toxicology Research Unit. **Subjects:** From the aforementioned settings, a convenient sample of 100 suicidal persons was included. **Tools:** The following tools were used to collect the data: **Tool (I):** A structured Interview Questionnaire. **Tool (II):** Beck's Suicide Intent Scale (BSIS). **Tool (III):** Depression Anxiety Stress Scales (DASS). **Results:** Less than two-thirds of the suicidal persons had moderate depression and medium suicidal intent. Additionally, more than two-thirds of suicidal persons experienced moderate levels of stress, and over half of them experienced severe levels of anxiety. **Conclusion:** According to the current study, the suicidal persons under investigation had moderate levels of stress and depression with severe level of anxiety, and they believed that the only way to deal with these stressors was to die. This resulted in a medium level of suicidal intention. **Recommendation:** Group activities, creative noncompetitive activities, and teaching them social skills for interacting with others as well as coping mechanisms for stress and suicide thoughts are all beneficial for suicidal individuals.

**Keywords:** Anxiety, Depression, Psychological distress, Suicidal behavioral, Stress.

### Introduction:

Suicidal behavior is the second most common cause of death for young people. Psychological stressors, particularly stress, anxiety, and depression, are a primary cause of suicide. Suicidal ideation sufferers lose sight of the fact that suicide is a permanent "solution" to a transient state because they are overcome by intense emotions and believe that death is the only way out. Suicidal thoughts can be active (thinking of methods to end one's own life, making plans) or passive (thinking, "What if I were dead?"). Giving away belongings or acquiring a firearm are examples of death preparations

that could raise serious concerns. Suicide is frequently unpredictable, but there are some warning signs, such as depression or other mental illnesses, talking about dying or "not being around" either directly or indirectly, becoming more socially isolated, making major changes to one's appearance and personal hygiene, giving away valuable possessions, making other death-related preparations, or experiencing an abrupt change in mood (Khalil, 2022).

One could think of suicide as a "silent enemy." Suicide can be committed in a variety of methods, such as self-poisoning, hanging, or firearm injuries, even though it is

frequently observed that people do not admit to having suicidal thoughts. In actuality, the general population has a misconception that the only people who are at danger of suicide are those who have been diagnosed with depression. Nonetheless, nearly 40% of those who kill themselves are not suffering from severe depression, suggesting that a number of psychological disorders may raise the risk of suicide (**Ibrahim et al., 2018**).

Psychological distress is known as social, physical and environmental conditions that challenges an individual's capacity for adaptation. These conditions reflect a very broad and diverse range of situations that have both common and unique psychological and physical characteristics and lead to stress, anxiety, and depression. Research on the relationship between stress, anxiety, depression and suicide shows that these psychological distress symptoms are closely associated with suicidal ideation, attempts, actions, and completion (**Achdut & Refaeli, 2020**).

Though the evidence was weakest for ideation, stressful situations and negative life experiences have been linked to suicidal thoughts, attempts, and actual suicide. Although life stressors are a clear possible cause of a suicide crisis, many of these stressors are common and do not cause suicidal thoughts or actions in the majority of people, suggesting that other factors (diathesis elements) may also be at play. Furthermore, suicidal thoughts and behaviors are associated with the areas of diathesis (major psychiatric diseases) and stress (life events) (**Peters et al., 2021**).

Additionally, studies have shown a positive correlation between stress and suicidal ideation. In the literature concerning

suicide, stress is frequently associated with unpleasant life events and/or unfavorable life experiences. People who are lonely and sensitive to distresses may be more prone to attempt suicide as a result of a variety of work-and-life-related stressors, including difficult life events, the death of a family member or friends, unemployment, and other environmental stressors (**Beghi et al., 2022**).

Mental-psychiatric health services have a significant role in lower the prevalence of psychological stress and suicide incidence as part of broader population and public health measures. To have the best chance of interacting with potentially suicidal individuals in the emergency room and in medical and surgical departments, it is critical to be aware of and comprehend suicidal behaviors (**Sadeniemi, 2022**). The psychiatric nurse has a critical and significant role in providing care for patients who have attempted suicide such as assessing suicidal potential, identifying risk factors for suicide, and knowing what to do if a client is truly contemplating suicide. When caring for patients who have attempted suicide, nurses must apply their understanding of the dynamics, causes, and epidemiology of suicidal behavior (**Vedana et al., 2022**).

Psychiatric nurses are on the front line in the prevention of suicide, suicide prevention is influenced by nurses' ability to accurately screen, assess, and manage a patient's suicide risk. The nurses need to be conscious of and monitor the patients' personal values and beliefs regarding suicide. When a patient is experiencing a suicide crisis, a psychiatric nurse should be mindful of their verbal and nonverbal cues. Nurses typically feel uneasy with such a high level of responsibility when a patient's life is at stake. If they have not initially looked honestly, psychiatric nurses

would find it extremely difficult to travel with patients who are experiencing severe emotional distress (Vedana et al., 2022).

### **Significance of the study:**

Suicide is one of the major issues facing mental and public health. Additionally, suicide has been listed as one of the top ten leading causes of death globally. According to WHO estimates, three suicides occur every minute. The WHO reported that by 2020, the number of suicides had increased to 1.4 million. By 2021, it is predicted that suicide will claim 1.53 million lives. Suicide rates among young people have dramatically increased in recent years, particularly among young girls. The most recent WHO data from 2020 shows that 3022 suicide fatalities, or 56% of all deaths, occurred in Egypt (Malakouti et al., 2021; Vargas-medrano et al., 2020).

The primary focus of this study understands the psychological factors that are important for prevention and treatment suicide among people in a specific cultural context. Proper understanding about the risk of suicide among people, an appropriate assessment process will facilitate the appropriate treatment being given to those who are at risk. On the other hand, there is a lack of researches about relationship between suicidal behaviors and psychological distress among suicidal patients in Egypt. Therefore, this study will be conducted to determine suicidal behaviors and psychological distress among suicidal persons in poisoning treatment and toxicology research unit at Benha City.

### **Aim of the study:**

The aim of this study was to determine suicidal behaviors and psychological distress among suicidal persons in poisoning

treatment and toxicology research unit at Benha city.

### **Research Questions:**

- 1- What are the suicidal behaviors among suicidal persons in poisoning treatment and toxicology research unit at Benha city?
- 2- What is the level of psychological distress among suicidal persons in poisoning treatment and toxicology research unit at Benha city?
- 3- What is the relationship between suicidal behaviors and psychological distress among suicidal persons in poisoning treatment and toxicology research unit at Benha city?

### **Subject and Methods**

#### **Research Design:**

To accomplish the goal of this study, a descriptive correlational approach was used.

#### **Research setting:**

The research was carried out at Poisoning Treatment and Toxicology Research Unit at Benha University Hospital, in Qalubia Governorate which is affiliated to the Ministry of High Education. Additionally, this facility offers emergency, free, and prompt services for any poisoning cases. Patients were kept in these section twenty-four hours a day, seven days a week, until their condition stabilized, which could take no more than six hours. If the condition was critical, they were sent to the poisoning unit's intensive care unit.

#### **Research Sample:**

A convenience sample of 100 suicidal persons from both sexes, their age ranged from 12 to 45 years old and the study was conducted during six months. The following formula has been used to determine the sample size:  $n = (z^2 \times p \times q) / D^2$  at 80% power and 95% confidence interval.

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### **Tools of data collection:**

To accomplish the study's goal, the following tools were being used.

#### **Tool (I): A structured Interview Questionnaire Sheet:**

It was created by researchers after examining relevant literature, including books, articles, magazines, and texts, and it was translated into Arabic. It was divided into two sections:

**Part (1): Socio-demographic data:** age, sex, marital status, educational level, occupation, place of residence, monthly income, and the patient cohabitated with.

**Part (2): Clinical data:** predisposing factors for suicide attempts, methods of suicide, family history of suicide attempt and family support.

#### **Tool (II): Becks' Suicide Intent Scale (BSIS):**

This scale was developed by **Beck, (1974)**. The scale was composed of 20 items designed to assess the severity of suicide intention associated with an episode of self-harm. On a Likert scale, 0 represents a low intention choice, 1 represents a medium intention option, and 2 represents a high intention choice. The final five scale items are excluded from the total score. These questions were reaction to attempt, visualization of death, number of previous attempts, relationship between alcohol intake and attempt and relation between drug intake and attempt.

Scoring system of the scale from (0-30) categorized as follows:

- 1- (0-15) is considered low intention of suicide
- 2- (16-20) is considered medium intention of suicide

- 3- (21-30) is considered high intention of suicide.

#### **Tool (III): Depression Anxiety Stress Scales (DASS):**

**Lovibond and Lovibind, (1995)** created this scale, which had 21 items covering three subscales: stress (7 items), depression (7 items), and anxiety (7 items). Three subscale scores of items assessed on a four-point scale were used to calculate the DASS total score. 0=Didn't apply to me at all (never), 1=Applied to me to some degree, some of the time (sometimes), 2=Applied to me to a considerable degree, or a good part of time (often) and 3= Applied to me very much, or most of time (Always).

#### **Scoring system for DASS:**

	Depression	Anxiety	Stress
Normal	0-4	0-3	0-7
Mild	5-6	4-5	8-9
Moderate	7-10	6-7	10-12
Severe	11-13	8-9	13-16
External Severe	+14	+10	+17

#### **Content Validity:**

A jury of five professionals in the field of Psychiatric and Mental Health Nursing were given tools. The tools were examined for their usefulness, clarity, comprehensiveness, and relevance. They believe that the Becks' suicide intent scale and the DASS were left unchanged.

#### **Reliability of the tools:**

The researchers used it to assess the tool's internal consistency by giving the identical instruments to the same people once in comparable circumstances. Test-retest reliability was used to compare the results of many tests. The overall score of the DASS has Cronbach's coefficient alpha of 0.874, but

the overall score of the Becks' Suicide Intent Scale is 0.618.

#### **Pilot study :**

Following tools development, a pilot study carried on 10% of the sample were excluded from the main study sample. The pilot study's objectives were to determine the tools' clarity, applicability, relevance, and content validity; estimate the time required to complete the sheet; and make the required adjustments.

#### **The results of the 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 :**

- The actual fieldwork took place over the course of six months, from early December 2022 to late May 2023.
- The researchers greeted and introduced himself to each participant at the start of the interview and given an explanation of the study's objectives and obtained verbal agreement to take part.
- Following the doctor's assessment of the participants' health stability, the researchers conducted one-on-one interviews with each participant while they were lying down on a bed at the poisoning and toxicology research unit.
- Every week, on Sundays and Tuesdays, from 10 a.m. to 1 p.m., the researchers conducted interviews with two to three subjects at the Poisoning Treatment and Toxicology Research Unit at Benha

University Hospital in the Qalubia Governorate.

- Each participant underwent an individual interview, which took an average of 45 to 60 minutes.
- After completing the interview questionnaire, each participant was asked to complete a scale measuring their level of stress, anxiety, and depression as well as their intention to attempt suicide.

#### **Administrative approval:**

- The Scientific Research Ethics Committee of Benha University's Faculty of Nursing provided the primary formal clearance letter (approval number: **REC-PSYN-P15**)
- To interview the participants, the director of Benha University Hospital received an official letter from the university's Faculty of Nursing. Participants gave their oral agreement to participate in the study, and all authorized personnel were informed of the study's purpose, title, and instruments. A thorough description of the study's goal would be investigated.

#### **Ethical consideration:**

The participant received clarification from the researchers regarding the purpose and goals of the study. Subjects were informed that the tool's content would only be used for research purposes and that they could withdraw from the study at any time without facing any repercussions. Each participant's anonymity and confidentiality were respected and protected.

#### **Statistical analysis :**

The statistical program for social science (SPSS) version 26 was used to arrange, computerize, tabulate, and analyze the data that had been gathered. Descriptive statistics, such as mean and standard deviation for qualitative variables and frequencies and percentages for quantitative variables, were



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used to present the data. The chi-square test was performed to compare qualitative variables, and the correlation coefficient was employed to gauge the degree and direction of the relationship between the variables. If  $P$  was less than 0.05, the difference was deemed statistically significant. If  $P$  was less than 0.001, a very statistically significant difference was taken into consideration.

### **Results:**

**Table (1)** indicates that 55.0% of the suicidal persons in the study were between the ages of 12 and 25. Their mean age was  $1.57 \pm 0.70$  years. Regarding sex, females make up 70.0% of the suicidal persons in the study. Regarding marital status, 48.0% of the suicidal persons in the study are unmarried. Additionally, 44.0% of the suicidal persons in the study have completed secondary education. Furthermore, 60.0% of the suicidal persons in the study do not have a job. Furthermore, urban areas are home to 54.0% of the suicidal persons in the study. Additionally, 77.0% of the suicidal persons in the study reported that their monthly income was insufficient. Additionally, 70.0% of suicidal person's cohabitate with their relatives.

**Table (2)** shows that family conflict is present in 40.0% of the suicidal persons in the study. Additionally, 53.0% of the suicidal persons in the study overdosed on their drugs during an attempted suicide. Additionally, 96.0% of the suicidal persons in the study have no family history of suicide attempts. Furthermore, 75.0% of the suicidal persons in the study have n't familial support.

**Figure (1)** shows that, 61.0% of the studied suicidal persons have medium intent attempt to suicide. While 39.0% of them have high intent attempt to suicide.

**Figure (2)** shows that, 67.0% of the studied suicidal persons have moderate level of stress. However, 63.0% of the studied suicidal persons have moderate level of depression. While, 57.0% of them have severe level of anxiety.

**Table (3)** makes it clear that there is a highly statistically significant relation between the socio-demographic traits of the investigated suicidal persons—such as age, sex, material status, monthly income, and the patient's cohabitation—and their overall level of suicidal intent attempt ( $P=< 0.001$ ). Furthermore, there is a statistically significant relation between their occupation and educational level at  $P=<0.05$ . However, there is no statistically significant difference between the total level of suicidal intent and occupation among the suicidal persons under study ( $p=>0.05$ ).

**Table 4** shows that there is a highly statistically significant relationship between the total level of intent to attempt suicide among the suicidal persons under study and their clinical data as suicide methods, family history of suicide attempts, family support, and predisposing factors for suicidal attempts ( $P=< 0.001$ ).

According to **Table (5)**, there is a highly significant relation between the socio-demographic features of the suicidal persons under study, such as age, sex, material position, monthly income, and the patient's cohabitation, and their overall level of psychological distress ( $P=< 0.001$ ). Furthermore, there is a statistically significant relation between their occupation and educational level at  $P=<0.05$ . However, there is no statistically significant difference between the occupation of suicidal persons and their overall psychological distress level ( $p=>0.05$ ).

According to **Table (6)**, there is a highly statistically significant relation between the total psychological distress of the suicidal persons under study and their clinical data regarding risk factors for suicidal attempts, suicide methods, family history of suicide attempts, and family support at ( $P < 0.001$ ).

**Table (7)** shows that, there is a highly statistically significant positive correlation between total level of intent attempt to suicide and psychological distress (depression, anxiety and stress) at ( $P > 0.001$ ).

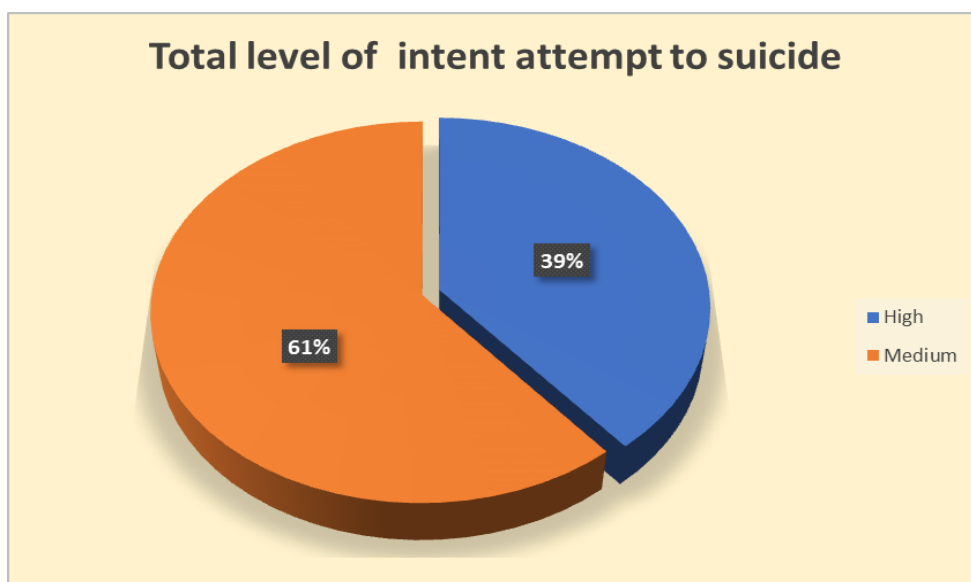
**Table (1): Distribution of the studied suicidal persons according to socio-demographic characteristics (n=100).**

Socio-demographic data	No.	%
Age		
12-<25 years	55	55.0
25-<35 years	33	33.0
35-<45 years	12	12.0
Mean SD	1.57 ± 0.70	
Sex		
Male	30	30.0
Female	70	70.0
Marital status		
Single	48	48.0
Married	24	24.0
Divorced	13	13.0
Separated	15	15.0
Educational level		
Basic education	21	21.0
Secondary education	44	44.0
High education	35	35.0
Occupation		
Employed	40	40.0
Unemployed	60	60.0
Residence		
Rural	46	46.0
Urban	54	54.0
Monthly income		
Enough	23	23.0
Not enough	77	77.0
The patient cohabitate with		
Alone	17	17.0
With family	70	70.0
With relatives	13	13.0

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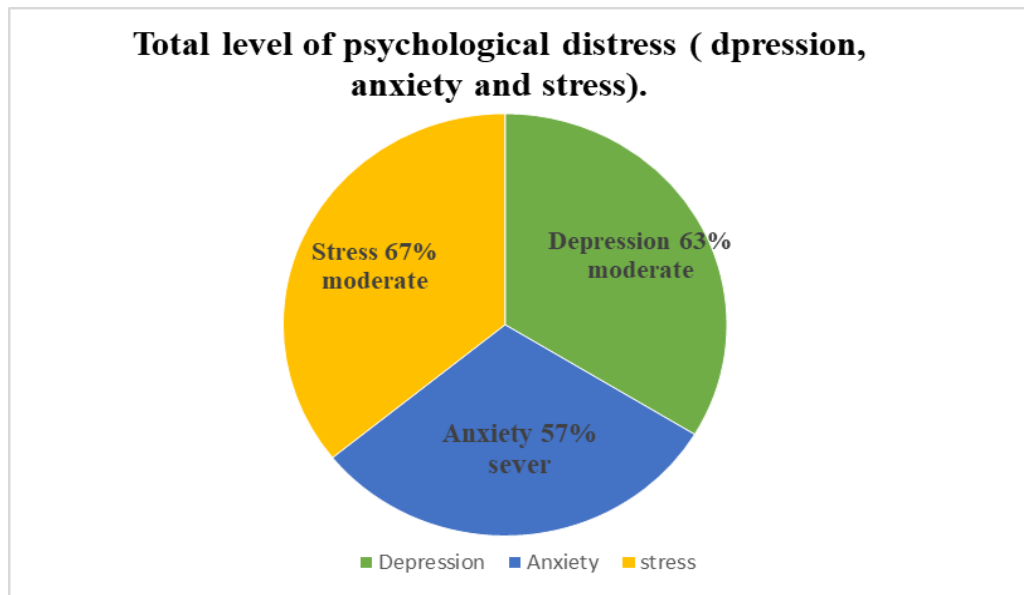
**Table (2): Distribution of the studied suicidal persons according to their clinical data (n=100).**

Clinical data	No.	%
<b>Predisposing factors for suicidal attempts</b>		
▪ Economic & financial	17	17.0
▪ Family conflict	<b>40</b>	<b>40.0</b>
▪ Failure in relationship	25	25.0
▪ Failure in education	13	13.0
▪ Being bullied	5	5.0
<b>Methods of suicide</b>		
▪ Rat poisoning	20	20.0
▪ Chemical substance	10	10.0
▪ Medication over dose	<b>53</b>	<b>53.0</b>
▪ Drugs abuse	17	17.0
<b>Family history of suicide attempt</b>		
▪ yes	4	4.0
▪ No	<b>96</b>	<b>96.0</b>
<b>Family support</b>		
▪ Present	25	25.0
▪ Not present	<b>75</b>	<b>75.0</b>



**Figure (1): Distribution of the studied suicidal persons according total level of intent attempt to suicide (n=100).**





**Figure (2): Distribution of the studied suicidal persons according total level of psychological distress (depression, anxiety and stress).**

**Table (3): Relationship between socio-demographic characteristics and total level of intent attempt to suicide among the studied suicidal persons (n=100).**

Socio-demographic characteristics		Total level of intent attempt to suicide				X <sup>2</sup>	P-Value
		Medium (n=61)		High (n=39)			
		No.	%	No	%		
Age (years)	12-<25	50	50.0	5	5.0	27.74	<0.001**
	25-<35	6	6.0	27	27.0		
	35-<45	5	5.0	7	7.0		
Sex	Male	7	7.0	23	23.0	16.00	<0.001**
	Female	54	54.0	16	16.0		
Marital status	Single	48	48.0	0	0.0	30.96	<0.001**
	Married	1	1.0	12	12.0		
	Divorced	5	5.0	19	19.0		
	Separated	7	7.0	8	8.0		
Educational level	Basic education	21	21.0	0	0.0	8.06	<0.05*
	Secondary education	31	31.0	13	13.0		
	High education	9	9.0	26	26.0		
Occupation	Employed	40	40.0	0	0.0	4.00	<0.05*
	Unemployed	21	21.0	39	39.0		
Residence	Rural	46	46.0	0	0.0	0.64	>0.05
	Urban	15	15.0	39	39.0		
Monthly income	Enough	23	23.0	0	0.0	29.16	<0.001**
	Not enough	38	38.0	39	39.0		
The patient cohabitate with	Alone	17	17.0	0	0.0	60.74	<0.001**
	With family	38	38.0	32	32.0		
	With relatives	6	6.0	7	7.0		

X<sup>2</sup>= Chi-square test. No significant at p > 0.05. \*Significant at p < 0.05. \*\*highly significant at p < 0.001.

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**Table (4): Relationship between clinical data and total level of intent attempt to suicide among the studied suicidal persons (n=100).**

Clinical data		Total level of intent to attempted suicide				X <sup>2</sup>	P- Value
		Medium (n=61)		High (n=39)			
		N	%	N	%		
Predisposing factors for suicidal attempts	Economic &financial	17	17.0	0	0.0	35.40	<0.001**
	Family conflicts	33	33.0	7	7.0		
	Failure in relationship	4	4.0	21	21.0		
	Failure in education	7	7.0	6	6.0		
	Being bullied	0	0.0	5	5.0		
Methods of suicide	Rat poisoning	20	20.0	0	0.0	43.92	<0.001**
	Chemical substance	10	10.0	0	0.0		
	Medication over dose	24	24.0	29	29.0		
	Drug abuse	7	7.0	10	10.0		
Family history of suicide attempt	Yes	3	3.0	1	1.0	84.64	<0.001**
	No	58	58.0	38	38.0		
Family support	Present	25	25.0	0	0.0	25.00	<0.001**
	Not present	36	36.0	39	39.0		

X<sup>2</sup>= Chi-square test. No significant at p > 0.05. \*Significant at p < 0.05. \*\*highly significant at p < 0.001

**Table (5): Relationship between socio-demographic characteristics and total level of psychological distress among the studied suicidal persons (n=100).**

Socio-demographic characteristics		Total level of psychological distress						X <sup>2</sup>	P-Value
		Mild (n=7)		Moderate (n=57)		Severe (n=36)			
		No.	%	No .	%	No.	%		
Age (years)	12-<25	0	0.0	33	33.0	22	22.0	27.74	<0.001**
	25-<35	7	7.0	12	12.0	14	14.0		
	35-<45	0	0.0	12	12.0	0	0.0		
Sex	Male	7	7.0	15	15.0	8	8.0	16.00	<0.001**
	Female	0	0.0	42	42.0	28	28.0		
Marital status	Single	0	0.0	26	26.0	22	22.0	30.96	<0.001**
	Married	7	7.0	13	13.0	14	14.0		
	Divorced	0	0.0	3	3.0	0	0.0		
	Separated	0	0.0	15	15.0	0	0.0		
Educational level	Basic education	0	0.0	15	15.0	6	6.0	8.06	<0.05*
	Secondary education	0	0.0	27	27.0	17	17.0		
	High education	7	7.0	15	15.0	13	13.0		
Occupation	Employed	0	0.0	22	22.0	18	18.0	4.00	<0.05*
	Unemployed	7	7.0	35	35.0	18	18.0		
Residence	Rural	0	0.0	24	24.0	22	22.0	0.64	>0.05
	Urban	7	7.0	33	33.0	14	14.0		
Monthly income	Enough	0	0.0	14	14.0	9	9.0	29.16	<0.001**
	Not enough	7	7.0	43	43.0	27	27.0		
The patient cohabitate with	Alone	0	0.0	15	15.0	2	2.0	60.74	<0.001**
	Family	7	7.0	29	29.0	34	34.0		
	Relatives	0	0.0	13	13.0	0	0.0		

X<sup>2</sup>= Chi-square test. No significant at p > 0.05. \*Significant at p < 0.05. \*\*highly significant at p < 0.001.

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**Table (6): Relationship between clinical data and total level of psychological distress among the studied suicidal persons (n=100).**

Clinical data		Total level of psychological distress						X <sup>2</sup>	P-Value
		Mild (n=7)		Moderate (n=57)		Severe (n=36)			
		N	%	N	%	N	%		
Predisposing factors for suicidal attempts	Economic & financial	0	0.0	15	15.0	2	2.0	35.40	<0.001**
	Family conflicts Failure in relationship	0	0.0	20	20.0	20	20.0		
		7	7.0	7	7.0	11	11.0		
	Failure in education	0	0.0	10	10.0	3	3.0		
	Being bullied	0	0.0	5	5.0	0	0.0		
Methods of suicide	Rat poisoning	0	0.0	15	15.0	5	5.0	43.92	<0.001**
	Chemical substance	0	0.0	0	0.0	10	10.0		
	Medication overdose	7	7.0	27	27.0	19	19.0		
	Drug abuse	0	0.0	15	15.0	2	2.0		
Family history of suicide attempt	Yes	0	0.0	1	1.0	3	3.0	84.64	<0.001**
	No	7	7.0	56	56.0	33	33.0		
Family support	Present	0	0.0	15	15.0	10	10.0	25.00	<0.001**
	Not present	7	7.0	42	42.0	26	26.0		

X<sup>2</sup>= Chi-square test. No significant at p > 0.05. \*Significant at p < 0.05. \*\*highly significant at p < 0.001.

**Table (7): Correlation between intent attempt to suicide and psychological distress (depression, anxiety and stress) among the studied suicidal persons (n=100).**

Variables		Total level of depression	Total level of anxiety	Total level of stress
Total level of intent attempt to suicide	r	.48	.74	.74
	p-value	.000**	.000**	.000**

## **Discussion**

Suicide is seen as a public health concern since it is the most extreme behavioral manifestation of psychological distress. Human life is full of stress, frustration, self-doubt, social pressure, economic instability, and physical illnesses; all of these factors are leading factors to psychological stressors like anxiety, stress, and depression during different age groups, which may lead to suicidal behavior. Suicidal attempts account for the majority of all deaths from cases (**Bonvoisin et al., 2020**). In the light of the previous, the current study was conducted to assess suicidal behaviors and psychological distress among suicidal persons in poisoning treatment and toxicology research unit at Benha city.

The current study found that, more than half of the studied suicidal persons were between the ages of 12 and 25, with a mean age of  $1.57 \pm 0.70$  years. Regarding sex, the current study found that less than half of the suicidal persons under study were unmarried women, while more than two-thirds were single. In terms of educational level, the current study revealed that less than half of the suicidal persons under investigation had completed secondary education. In terms of occupation, the current study found that more than three-quarters of the suicidal persons in the study said that their monthly income was insufficient, and over half of the persons were unemployed. In terms of residence, the current study revealed that over 50% of the suicidal persons under investigation lived in cities.

Regarding the predisposing factors for suicidal attempts, the results of the current study displayed that, less than half of the studied suicidal persons had family conflicts. According to the researchers, unemployment, inadequate income, and improper family

assistance may be the cause of family problems. In line with **Scardera et al., (2020)** the study found that over one-third of the suicidal individuals in the study had family conflict, problems, and a lack of family support. Furthermore, the study was consistent with **Harnod et al., (2018)** found that over 50% of their suicidal individuals said that low income and family problems were risk factors for suicide thoughts.

In terms of suicide methods, the current study showed that more than half of the suicidal persons in the study overdosed on drugs during their suicide attempt. According to the researchers, this might be because they believe that taking too much medication is the greatest way to end one's life with minimum suffering. The findings was consistent with a study by **Spiller et al., (2020)** which found that the most frequent mechanism of all suicide attempts was poisoning with medicine overdose. However, the study disagreed with **Gvion & Levi-Belz, (2018)** and found that the majority of suicidal individuals employed gunshots and hanging as a suicidal technique.

The current study found that, with regard to family history of suicide and support, the majority of the suicidal persons under investigation—three-quarters—had no family history of suicide attempt or support. According to the researchers, this could be the result of family problems and conflicts that lead to lack of confidence in family members. This finding was consistent with that of **Al-Amin et al., (2021)** and found that over half of their suicidal persons were living without family support and that the majority of them had no family history of mental illness or suicide attempts. On the other hand, the study was contrary to **Stanley et al., (2019)** and showed that most of the sample had familial support.

## **Suicidal Behaviors and Psychological Distress Among Suicidal Persons in Poisoning Treatment and Toxicology Research Unit at Benha City**

According to the overall level of intent attempted to suicide, more than half of the suicidal persons in the current study had a medium intended attempt at suicide. According to the researchers, this might be because they have an innate desire to terminate and end their life. A lack of social and psychological support, a lack of spiritual habits, and a high level of psychological stressors and perceived psychological issues could also be the cause. The study found that almost half of suicidal people exhibited high suicidal intent, which was consistent with **Gooding et al., (2019)**. In contrast to **Sabry et al., (2018)** the study found that over half of the suicidal individuals showed lower levels of suicidal intent.

In terms of the total level of depression, the current study found that less than two-thirds of suicidal persons experienced moderate level of depression. According to the researchers, this might be because of psychological stressors brought on by traumatic events, disputes with family and friends, a lack of social support, and a lack of coping mechanisms when dealing with challenges and unpleasant life experiences. In line with **Cai et al., (2021)** the study found that over half of the suicidal individuals experienced life-altering depression symptoms. Additionally, **Del Carpio et al., (2021)** corroborated the study, which found that the majority of their suicidal individuals displayed signs of high depressive symptoms, including sadness, social isolation, avoidance of initiative, drug misuse, and loss of interest. On the other hand, the study contradicted **Abdu et al., (2020)** by showing that major depressive disorders such drug addiction and social isolation were present in less than half of suicidal individuals.

According to the study, more than half of the suicidal individuals in the current study exhibited severe level of anxiety. According to the researchers, psychological problems and unstable psychological health conditions may be linked to this, and suicidal thoughts and self-harm are frequently accompanied by symptoms of anxiety. Additionally, high levels of anxiety may be linked to an inability to cope with emotional challenges and a disconnection from conventional support networks. **Kaniuka et al., (2020)** provided support for the current study, which showed that over half of the suicidal individuals in the study had severe levels of anxiety. Furthermore, **Wiebenga et al., (2021)** supported the current study and found that the majority of suicidal individuals in their study had a severe anxiety illness that had affected them for more than a year and affected them for the rest of their lives. On the other hand, the study was inconsistent with **Duffy et al., (2019)** and showed that over half of suicidal individuals experienced minor anxiety symptoms.

According to the current study's findings, more than two-thirds of suicidal persons had moderate levels of stress. According to the researchers, this might be attributed to potential traumas, a person's temperament, which helps them cope with their surroundings, and their resilience, which could account for varying reactions to the same stressful situations. According to the study, which was backed by **Martins-Monteverde et al., (2019)** the most suicidal people had significant levels of stress that interfered with their lives and affected their relationships. Furthermore, **Oquendo et al., (2021)** endorsed the study, which found that over half of the participants had high levels of



stress in contrast to the small percentage of suicidal individuals with low levels of stress.

The current study found a highly statistically significant difference between the age of the suicidal person under study and their overall level of intent to attempt suicide on the basis of their level of intent. According to the researchers, this suggests that the psychological traits and emotions of suicidal individuals are influenced by demographic factors. In this age group, emotional conflict, the lack of a support system, increased family conflict, and social impairment all contribute to an increase in suicidal ideation. The study, which was endorsed by **Liu et al., (2020)** demonstrated a strong correlation between suicide ideation and demographic traits such age, educational attainment, and social support.

The current study found a highly statistically significant association between the level of intent to attempt suicide and the sex of suicidal persons under study. According to the researchers, this might be because the majority of women in our community experience social and domestic constraints, and they are also overwhelmed by their psychological status. In line with **El-kholy, (2023)** the study found a highly significant correlation between demographic factors such sex, material status, income and occupation and suicidal ideation.

Accordingly, the current study showed a highly statistically significant difference between the examined suicidal persons' monthly income (insufficient) and their level of intent to try suicide. According to the investigator, this might be because Egyptian citizens' income is insufficient to cover their basic expenses, which has a detrimental impact on social life and may even cause some to take their own lives. In line with **El-kholy, (2023)** the study found a highly

significant correlation between demographic factors such sex, material status, income and occupation and suicidal ideation.

Pertaining to the relation between the total level of suicidal intent and clinical data among the suicidal persons under study. The current study's findings demonstrated a highly statistically significant relationship between the total level of suicidal intent attempt among the suicidal persons under investigation and predisposing factors for suicidal attempts regarding to factors related to family conflict and family support. According to the researchers, this might be because family conflict and a lack of family support were linked to higher psychological stressors, a higher risk of depression, and suicidal thoughts. According to the study, which was consistent with **Abdu et al., (2020)** there was a strong positive correlation between suicidal intent and their social relationships, family history, and the existence of prior suicide risk factors like family conflict and a lack of family support.

The current study's findings demonstrated a highly statistically significant relationship between the methods of suicide and the total level of suicidal intent among the persons under investigation. According to the researchers, taking too much medication from the drugstore without a prescription was simple, and it caused less pain than any other method that could have led to a suicide attempt. In line with **Al-Amin et al., (2021)** the study found a highly significant correlation between drug poisoning and attitudes toward self-poisoning suicide deaths.

Regarding the relation between socio-demographic traits and overall psychological distress among the suicidal persons under investigation, the findings of this study

demonstrated a highly statistically significant relationship between psychological distress levels and the socio-demographic traits of the suicidal persons under investigation, such as age and sex. According to the researchers, young girls experience stress because they are more sensitive than boys and are more likely to be suicidal. This emotional instability has a detrimental impact on their lives and causes stress. In line with **Bickford et al., (2020)** the study found a substantial correlation between psychological stress levels and suicidal individuals' age and sex. In contrast to **Stanley et al., (2019)** the study found no significant differences in stress levels across their demographic data, including age, gender, and marital status.

The current study's findings demonstrated a highly statistically significant relationship between the psychological distress level and the monthly income and marital status of suicidal persons. According to the researchers, women experience stress and emotional instability as a result of their poor income and concern of finding a compatible life partner. Supported by **Liu et al., (2020)** the study demonstrated a highly substantial relationship between psychological stress and demographic variables such marital status, monthly income, educational attainment, and social support. In contrast, **Stanley et al., (2019)** the study found no significant differences in the stress levels of patients and suicidal individuals' demographic data, including age, gender, marital status, and monthly income.

Regarding the relationship between the total level of psychological distress and the clinical data of the suicidal persons under study, the findings of this study showed a highly statistically significant relation between the overall level of psychological distress and the factors that predispose the

suicidal persons under study to attempt suicide as well as family support. According to the researchers, this could mean that prior risk factors including family conflict, marital failure, and a lack of family support could make stress more intense. In line with **McHugh et al., (2019)** the study found a substantial correlation between psychological stress and family support and predisposing factors for suicidal attempts. On the other hand, the study disagreed with **Stanley et al., (2019)** and found no connection between the psychological stress of the patients, the family support and suicidal attempt risk variables.

Regarding the correlation between intent attempt to suicide and psychological distress (depression, stress and anxiety) among the suicidal persons under investigation, the current study's findings showed a highly statistically significant positive correlation between total intent to commit suicide, depression, stress, and anxiety. This may be because, according to the researchers, psychological stresses including stress, anxiety, and depression are linked to suicidal intent, suicidal thoughts, and suicidal ideation. Additionally, data indicates that a high level of overall suicidal intent occurs when depression, anxiety, and stress levels become severe.

In line with **Kaniuka et al., (2020)** the study demonstrated how multivariate analyses mediated the relationship between suicidal behavior and symptoms of depression and anxiety. Specifically, higher levels of psychopathology were linked to higher levels of suicidal behavior, which in turn led to more suicidal behavior. Furthermore, the study, which received support from **Amit et al., (2020)** found a substantial association between the sample's intention to end his life and psychological stresses such stress, anxiety, and depression.

## **Conclusion**

According to the current study, the suicidal persons under investigation had moderate levels of stress and depression with severe level of anxiety, and they believed that the only way to deal with these stressors was to die. This resulted in a medium level of suicidal intention. Furthermore, there was a highly statically significant positive correlation between total level of intent attempt to suicide and psychological distress (depression, anxiety and stress).

## **Recommendations**

### **Recommendation for nursing practice:**

- A structured counseling program should be created for individuals' friends and family to assist their coping skills with stress and depression and to give them the social and emotional support they need, in order to prevent symptoms recurrence and suicidal attempts.
- Patients with depression must have regular checkups to determine their risk of suicide.
- Group activities, creative noncompetitive activities, and teaching them social skills for interacting with others as well as coping mechanisms for stress and suicide thoughts are all beneficial for suicidal individuals.

### **Recommendation for research:**

- To obtain generalizable results, it is strongly advised that the current study be replicated on a larger probability sample with long-term follow-up of such suicidal attempts.

### **Recommendation for community:**

- School and university play role in suicide prevention spend a substantial part of their day in school and university. Effective suicide and violence prevention is integrated with supportive mental health services, engages the entire community, and is imbedded in apposite school and university climate

through person behavior exceptions and a caring and trusting person relationship.

- Make program all over the community to monitor symptoms and signs for attempt to suicide and paly role to prevent suicide and suicide ideation through large awareness campaign in the media, schools, universities and work field.

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## السلوكيات الإنتحارية والضغط النفسية بين الأشخاص المنتحرين في وحدة علاج التسمم وأبحاث السموم بينها

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يُعد السلوك الانتحاري مشكلة صحية عامة وخطيرة، فهو يُمثّل أشد أشكال التعبير السلوكي عن الضغوط النفسية. لذا هدفت الدراسة إلى تحديد السلوكيات الانتحارية والضغط النفسية بين الأشخاص المنتحرين في وحدة علاج التسمم و أبحاث السموم بينها. أجريت هذه الدراسة في وحدة علاج التسمم وأبحاث السموم بمستشفى بنها الجامعي، حيث تم استخدام تصميم ارتباطي وصفي في هذه الدراسة وتم اختيار عينة ملائمة مكونة من ١٠٠ شخص ذوي ميول إنتحارية. كشفت هذه الدراسة عن النتائج الآتية: أقل من ثلثي الأشخاص الذين أقدموا على محاولات إنتحارية كانت لديهم نية انتحار متوسطة ومستوى متوسط من الإكتئاب. كما أن أكثر من نصفهم كانوا يعانون من مستوى شديد من القلق، وأكثر من ثلثهم كانوا يعانون من مستوى متوسط من التوتر. وقد أسفرت النتائج علي أن الأشخاص الذين شملتهم الدراسة كانوا يواجهون مستويات متوسطة من التوتر والاكتئاب، إلى جانب مستوى شديد من القلق، ويعتقدون أن الموت هو الحل الوحيد لهذه الضغوط، مما يؤدي إلى وجود نية انتحار بدرجة متوسطة. التوصيات: بالنسبة للأشخاص ذوي الميول الانتحارية، ينبغي تنظيم جلسات جماعية، وأنشطة إبداعية غير تنافسية، وتعليمهم مهارات التواصل الاجتماعي والتفاعل مع الآخرين، إضافةً إلى كيفية التعامل مع الضغوط النفسية والأفكار الانتحارية.