

CORRELATION BETWEEN ADOLESCENT'S SUICIDAL IDEATION AND THEIR PERCEIVED STRESS

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Abstract

This study looks into how suicidal ideation in adolescents are impacted by perceived stress. Perceived stress is an individual's subjective evaluation of how stressful they believe particular circumstances in their life to be, and it has been linked to several negative consequences on mental health. The research aims to investigate the relationship between perceived stress and suicidal ideation in youths.

Objective: To investigate the relationship between perceived stress and the development of suicidal ideation among adolescents at secondary schools.

Materials and Methods: A cross-sectional descriptive study was conducted and a stratified random sample of (385) students from (12) secondary schools was selected randomly from (56) secondary schools during the period from 15th October to 1st September. Data was collected by a direct interview with participant by using a study instrument consists of three parts, the first was socio-demographic data the second consisted of (16) items of suicidal ideation scale (SIQ), and the third part consisting of perceived stress scale (PSS) with (10) items. Descriptive and inferential statistical data analysis approaches were applied in order to analyze the data.

Results: The study results illustrate there was a moderate, linear, positive relationship between perceived stress and suicidal ideation ($r = .523$, $p \text{ value} = .000$) among adolescents.

Conclusions: Study conclude there was a moderate correlation between perceived stress and developing suicidal ideation among adolescents, Thus, it highlights the necessity of all-encompassing interventions that deal with mental health assistance as well as stress management in order to reduce the risk of suicide thoughts in this susceptible group.

KEYWORDS: Perceived Stress, Suicidal Ideation, Adolescents.

1. Introduction

Adolescents between the ages of (10 and 19) are essential for both social and economic development. Adolescents face many challenges as they transition to adulthood. Risk factors developed during adolescence directly affect health throughout adolescence and throughout the lifespan, according to WHO, which recognizes that investing in teens brings triple benefits through immediate results during adolescence, in their adult lives, and in the well-being of their future children (1). Adolescence is considered to be a vulnerable age period for an individual, most mental disorders are first diagnosed during this developmental period and are associated with poor physical and mental health outcomes during adulthood (2). Adolescents struggle more to cope with acute stressors such as the end of a relationship, situations that cause embarrassment or humiliation, rejection by social groups, academic failure, and the loss of loved ones because of their tendency to be short-tempered, impulsive, and not fully emotionally mature, these incidents may serve as catalysts for suicide behavior, and suicidal ideation raises the chance of further suicide attempts (3). Up to 9% of adolescents experience depression each year, making it one of the most common debilitating disorders in adolescence. It frequently has a complex illness trajectory and may have a severe detrimental effect on an adolescent's and family's health and resources, adolescent depression has

significant short- and long-term personal, interpersonal, and societal costs. Most people with recurrent depression first experience depression as adolescents, compared to depression that strikes an adult, early-onset depression disorders are more persistent and incapacitating (4). There is a chance that adolescent self-harming activities could develop into suicidal thoughts. Suicidal ideation is a manifestation of the pain brought on by internal conflicts, sadness, or anxiety as a result of significant physical, mental, and social change (5). Self-poisoning, self-burning, self-hanging, and weapons are the most popular means of suicide, Despite the face of the fact that it is thought to be underreported, suicide and suicidality are increasing in Iraq. Despite religious and social taboos, a variety of sociodemographic, environmental, and psychological factors can lead to suicidal thoughts, attempts, and completions, due to increased rates of depression, and interpersonal and domestic abuse, young females are more likely to attempt suicide, and have suicidal thoughts using potentially fatal means like self-burning (6). Exposure to stressful conditions on a regular basis can lead to psychological distress, mental health problems, depression, and anxiety symptoms, all of which might increase the risk of suicide thoughts. We should be aware of the need to avoid stress and thoughts of suicide, as well as the potential benefit of doing so in terms of protecting ourselves against the beginnings of psychological disorders and illnesses such as

depression. Understanding how people could be taught to manage stress is essential since unfavorable experiences at work and in the classroom might increase the likelihood of suicide thoughts and conduct (7). When people are put in a physical or psychological condition that they are unable to handle they perceive stress which has detrimental repercussions on their health, the relationship between perceived stress and suicidal conduct may be direct or indirect depending on how it affects mental health functioning, for example, by contributing to the onset and persistence of depressive symptoms and these can contribute to suicide conduct independently and as a potential result of perceived stress (8).

2. Materials and Methods

Study design: A cross-sectional descriptive study.

Study setting: The current study was conducted on secondary school which were located in Iraq; Thi-Qar Governorate; Al Nasiriya City.

Study sampling: The target population sample was (37110) students spread over 56 secondary schools in Al Nasiriya city center, these schools were distributed across the city's neighborhoods and areas, the sample size of the study was based on the Richard Geiger equation.

Instrument of study: The tool consists of four parts:

Part 1: Socio-demographic data that include: age, gender, grade level, type of family; student arranged in family; the educational level of fathers and mothers, occupation level of fathers and mothers, and monthly income.

Part 2: The second part was related to depressive symptoms and used Burn's Depression Scale (BDS) which includes 10 items to assess thoughts and feelings, 7 items to assess activities and personal relationships, and 3 items to assess physical symptoms.

Part 3: The third part was related to the suicidal ideation scale where used (SIQ); 16 items consisted of sentences about suicidal thoughts to assess if the adolescents have had them in the past month.

Part 4: The fourth part related to the perceived stress among adolescents where used the perceived stress scale (PSS) consisting of 10 items.

Ethical Approval: The study was achieved in accordance with the ethical approval before data collected, the study protocol appraised and approved by nursing collage domestic committee, theme information, and permission form (dated June 26, 2023).

3. Results

The following are the tables that showed the systematic data analysis outcomes and how they matched the study's objective.

Table 1: Frequencies, and Percentage of Participants and their Family Demographic Data

N	Demographic data	Rating	F.	%
1	Age	16	120	31.2
		17	122	31.7
		18	80	20.8
		19 and above	63	16.4
2	Gender	Male	186	48.3
		Female	199	51.7
3	Type of family	Nuclear Family	336	87.3
		Extended Family	49	12.7
4		3-6	165	42.9

	Family Member	7-10	195	50.6
		More than 10	25	6.5
5	Father's Level of Education	Below preparatory school	162	42.1
		Preparatory school	55	14.3
		institute	64	16.6
		College and above	104	27.0
6	Mother's Level of Education	Below preparatory school	232	60.3
		Preparatory school	61	15.8
		institute	33	8.6
		College and above	59	15.3
7	Father's employment	Unemployed	132	34.3
		Employed	212	55.1
		Retired	41	10.6
8	Mother's employment	Housewife	295	76.6
		Employed	76	19.7
		Others	14	3.6
9	Monthly income	Low	65	16.9
		Moderate	130	33.8
		High	190	49.4
10	Social status	Single	369	95.8
		Married	10	2.6
		Separate	6	1.6
11	Lived with	With one of the parents	33	8.6
		With parents	347	90.1
		With someone else	5	1.3
12	Resident	Urban	356	92.5
		Suburban	25	6.5
		Rural	4	1.0

F= Frequency; %= Percent

This table shows that (31.2%) and (31.7%) of study participants age were 16 and 17 years respectively, (51.7%) were female, (87.3%) were lived in a nuclear family, and (50.6%) were lived in family with (7-10) members. In addition, (42.1%) and (60.3%) of fathers and mothers respectively were below preparatory school. In terms of parents' occupation, the data show that moms (76.6%) were housewives, fathers (55.1%) were employed, and (49.4%) had high monthly incomes; Additionally, according to the study's findings, 90.1% of participants lived with their parents and 95.8% of participants were single. Finally the results show that (93.5) of students didn't had any physical illness and (92.5%) of their resident were urban.

Table 2: The level of depressive symptoms, suicidal ideation and perceived level among the adolescents

Main domain	Level	F	%	m.s	Level
Suicidal ideation	Low	205	53.2	1.62	L
	Moderate	122	31.7		
	High	58	15.1		
	Total	385	100.0		
Perceived stress	Low	63	16.4	2.25	M
	Moderate	164	42.6		
	High	158	41.0		
	Total	385	100.0		

F= Frequency, %= Percent, m.s=mean of score, H=High, M=Moderate, L=Low

The study results indicate that the participants had low level of suicidal ideation, and moderate level of perceived stress with mean of scores equal to (1.62, and 2.25) respectively, regarding the (0.66) statistical cutoff point.

Table 3: The correlation between study participants' perceptions of stress and suicidal ideation

Main domain	Suicidal ideation		
	r	P value	Sig.
Perceived stress	0.523	0.000	S

=(p-value $\geq$ 0.05)

This table shows the Spearman correlation coefficients between suicidal ideation and perceived stress for the study sample, where the results showed there was a positive correlation between perceived stress and suicidal ideation ($r = .523$, p value = .000) among adolescents at a p-value $\leq$ 0.05.

4. Discussion:

The participants' demographic features in the study:

According to the demographic data, table (1) show that most of the study participants were (16 and 17) years old, more than half were female, most of them lived in a nuclear family, and more than half lived in a family with (7-10) members. In addition, most of their fathers and mothers were below preparatory school. In term of parents' occupational status, the results show that more than half of fathers were employed, and the majority of mothers were housewives, also nearly half had high monthly income. Lastly, the study's findings show that most of its participants were unmarried and lived with their parents..

Suicidal ideation among adolescents

Table (2) show that the study subjects' suicidal ideation was low level with (m.s = 1.62), and there were (15.1%) of adolescents had high level of suicidal ideation, and (31.7%) of them had moderate level of suicidal ideation, that can be linked to the intricate interaction of social, psychological, and biological aspects, the hormonal changes during adolescence can affect mood regulation and increase vulnerability to mental health issues, including suicidal thoughts. Additionally, the impact of psychological factors such as low self-esteem and feelings of hopelessness as contributors to suicidal ideation. This finding was also reported by Jasim et al (2017), who carried out an epidemiological study in the academic year 2016–2017 to determine the prevalence of suicidal ideation among Iraqi secondary school students in Babylon province. The study's findings showed that nearly half of the participants (49.5%) reported considering taking their own life (10).

Perceived stress among adolescents

Study result show that the perceived stress level among adolescents was moderate level at (m.s = 2.25), that can be attributed to a combination of developmental, environmental, and individual factors: people go through substantial physical and emotional changes during adolescence, and cognitive changes, which can lead to increased sensitivity to stressors and a heightened perception of stress, the impact of environmental factors such as academic pressure, social expectations, and family dynamics on adolescents' stress levels. Also, the transition to high school, peer relationships, and concerns about

the future can contribute to perceived stress among adolescents. This finding supported by Gonmei & Devendiran (2017) in their study (Perceived stress and psychosocial factors of stress among youth), the results indicated that students experience a moderate level of stress (11).

The relationship between adolescents' development of suicidal ideation and their perception of stress

Table (3) showed that there was that there was a moderate, linear, positive relationship between suicidal ideation and perceived stress ($r = .523$, p value = .000) among adolescents, this indicate that, when the perceived stress increased the suicidal ideation increased, due to the positive scoring between these two domains, These relationships may partly be explained by the prolonged activation of the stress response system, coupled with maladaptive coping strategies, which can exacerbate feelings of hopelessness, helplessness, and emotional pain—factors strongly associated with suicidal ideation. Another possible explanation for this is that perceived stress can influence adolescents' problem-solving abilities and decision-making processes, potentially leading to a sense of entrapment and a reduced ability to envision alternative solutions to their distress. This cognitive inflexibility, combined with heightened emotional distress, may contribute to an increased risk of suicidal ideation among adolescents experiencing high levels of perceived stress. The results of the study "The relationship between suicidal behavior and perceived stress: The role of cognitive emotional regulation and problematic alcohol use in Spanish adolescents" by Ballabrera et al. (2023) corroborated this finding, demonstrating positive and significant associations between the risk of suicidal behavior and perceived stress (13).

5. Conclusions and recommendations

The objective of the current investigation was to ascertain the connection between adolescent suicidal ideation development and perceived stress. Perceived stress and the emergence of suicidal ideation in adolescents are moderately correlated, according to study findings. In order to reduce the likelihood of suicidal ideation in this susceptible group, the researchers emphasized the importance of comprehensive interventions that target stress management as well as mental health assistance. This would be a productive topic for additional research on adolescent suicide behavior to identify additional risk variables that support the creation and implementation of efficient intervention programs to both prevent and treat.

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