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Analysing Risk Factors For Suicidal Thoughts Among Undergraduate Medical Students

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ABSTRACT

The main objective of the study is to analyse risk factors for suicidal thoughts among undergraduate medical students. The study is an analytical cross sectional study conducted among 536 undergraduate MBBS students of Government Medical College, Pudukkottai, Tamilnadu, India. The study protocol was presented before the institutional ethical committee for approval and got approved. Individual informed consent was obtained from the participants. A structured questionnaire was used to collect the data. The participants were asked to fill the forms in privacy. The confidentiality of the data collected was strictly ensured by electronic storage. Thoughts of suicide was observed among 7.8% of the participants. Twenty two of 306 female participants and 20 of 230 male participants had suicidal thoughts. Depression, anxiety and psychotism contains correlation values (r) of 0.501, 0.520 and 0.553, respectively depicting that these symptoms have a strong relationship towards the thoughts of suicide among the participants and p-values fulfill the significance. Somatization, obsessive compulsive disorder (OCD), interpersonal sensibility, appearance of distressing symptom, paranoid ideation, phobic anxiety and anger hostility contains the value of correlation (r) of 0.465, 0.448, 0.431, 0.330, 0.421, 0.429, 0.441 respectively showing they are having a moderate relation towards the thoughts of suicide among the participants by fulfilling the value of significance. Stress was also a significant factor for suicidal thoughts.

INTRODUCTION

Suicidal behavior is a self-injurious behavior that is involved with the intent to end one's life such as hanging/strangulation, severe cutting and jumping from heights^[1]. Suicidal ideation is higher among females and nonworking mothers^[2]. For every 40 seconds, a person dies by suicide somewhere in the world. Over 800,000 people commit suicide every year. Yet suicides are preventable if recognized and adequate measures are taken. "Preventing suicide: A Global Imperative" is the first WHO report of its kind^[3]. Suicide behavior results from psychological, biological, social and environmental factors which will interact to steer to suicidal behavior^[4]. Suicide ideation involves thoughts of serving as the agent of one's death.

In contrast, a suicide attempt is a self-injurious behavior with a non-fatal outcome accompanied by implicit evidence that the person intended to die^[4]. Psychological distress, suicide ideation and attempts are trouble among university students^[15]. Health care providers are one of the highest risk groups for suicide and this problem starts during medical school^[6]. The strong predictors of attempted suicide are depression and suicidal ideation^[7]. In comparison with the general population, the rate of suicide among medical students was high. Suicidal thought negatively impacts the life quality, physical and mental health of the students. These higher rates have been attributed to environmental factors, such as stress and the rigors of the medical training^[8]. Medical training involves intense academic pressure and competition. Understandably, the prevalence of mental distress and suicidal behaviors is high among medical students^[9]. Various factors can play a role in the development of suicidal behavior. These include burnout, sleep disorders, a case history of mental illnesses, previous psychiatric disorders, depression, poor social support, living alone, feeling neglected by parents, having lost something valuable, the number of years of study, gender, substance use, the breaking of a gentle love relationship and poor physical health^[10].

REVIEW OF LITERATURE

Suicide is a many-sided blade that poses an alarming concern among Medical students. Suicide, in and of itself is an infestation that plagues the general public but Suicide rates among Medical students and healthcare workers are comparatively higher than the General Public^[11]. A Region-wide study conducted in South India for Medical Undergraduates has revealed that about one-fifth of the students have Suicidal thoughts, one-tenth have Formulated Suicidal Plans

and a few students South of 5% have committed Active Suicidal Attempts^[12]. It also appears that death by hanging is the most prevalent means of demise and the most notorious reason is the academic stress among the medical students and residents. On Further introspection, it seems that Medical Undergraduates who are in their Clinical years were more open to Suicidal ideas when compared to their Pre pre-clinical counterparts (8% vs 2.8%)^[13]. A study postulated that Suicidal literacy among Medical Undergraduates was mostly poor and this was associated with similarly low knowledge about Depression, all of which indicates the need to instigate understanding within the students on these topics^[14].

Furthermore, another study from Delhi reports a higher suicidal ideation more than 50% but a low rate of suicidal attempts (2.6%)^[5]. Yet another study states that 15.2% of the subjects have injured themselves with suicidal intent most often acting impulsively^[15]. Chahat *et al.*^[16] reported that even though 26% of Medicos in their 10-year register of students have died by Suicide and had exhibited prior suicidal warning signs only half had actively sought psychiatric help before their demise. Medical training involves intense academic pressure and competition. Among medical students the prevalence of mental distress and suicidal behaviors were high. At the individual level, identification of common psychiatric symptoms, recognition of suicidal warning signs, adequate assessment and appropriate referrals can prevent potential suicides, for high-risk groups various strategies have been implemented. The introduction of technological methodologies may increase the reach of these preventive strategies^[17].

MATERIALS AND METHODS

The study is an analytical cross sectional study conducted among 536 undergraduate MBBS students of Government Medical College, Pudukkottai, Tamilnadu, India. The study protocol was presented before the institutional ethical committee for approval and got approved. Individual informed consent was obtained from the participants. A structured questionnaire was used to collect the data. The participants were asked to fill the forms in privacy. The confidentiality of the data collected was strictly ensured by electronic storage. The study was conducted over a period of 6 months from June 2020 to November 2020.

Selection criteria:

Inclusion criteria: Willing Undergraduate medical students irrespective of age and sex.

Exclusion criteria: Students unwilling to give consent.

Instruments used:

- Semi-structured proforma.
- Symptom check list scale 90 (SCL 90)^[16]
- General health questionnaire 12 (GHQ12)^[9]
- Presumptive stressful life events scale (PSLE SCALE)^[16]

Semi-structured proforma: Semi-structured proforma was used to get information of the students and to classify them on the basis of B.G.Prasad's classification.

Symptoms check list scale 90: Symptoms check list contains 90 questions and consists of three domains, which consists of depressive symptoms, psychotic symptoms and symptoms related to physical illness. Each question is to be answered, in each question the distress level was divided into 0, 1, 2, 3, 4, with 0 representing "not at all distressed", 1 representing "a little bit distressed", 2 representing "moderate distress", 3 representing "quite a bit distress" and 4 representing "extremely distressed". Final score obtained by summed up and divided.

General health questionnaire 12: General health questionnaire contains 12 questions. The authors of this scale were Goldberg and Williams-1988. The GHQ 12 is a measure of current mental health, which focused on two areas, one is the inability to carry out normal functions and two is the appearance of distressing experiences. To be applied to participants and to be asked whether he/she had a particular symptom or behavior recently and final score to be summed up. If the score was 3 and above, it was considered to be a significant result.

Presumptive stressful life events scale: The presumptive stressful life events scale (PSLE scale) contains 51 items, the range of the scores is from 20 to 95, most of the subjects would have had more than one stressor. The stressors were analyzed for the previous one year by using this scale. Each item was to be scored and finally to be summed up. Then it will be divided into low, medium, high stress life events based on scores less than 150, 150-300 and more than 300 respectively. This scale is revised from Holmes and Rahe's social Readjustment rating schedule (SRRS), because many of the categories could not be applied to Indian population.

Data analysis: The data will be entered and analyzed by using statistical package for social sciences (SPSS version 21.0) software package. Descriptive statistics will be used to define the study population. Categorical

and ordinal variables will be expressed as frequency, percentages. Appropriate tests of significance (independent t-test) will be applied to the study variables to establish the relation between the study variables. Chi-square test will be applied to proportions. A 'p value' of less than 0.05 was considered to be statistically significant. Microsoft excel will be used to generate graphs and charts.

RESULTS

Gender distribution among the participants (N = 536):

Among the participants, Majority of them were females (57.1%) while the percentage of males was 42.9%. It is depicted in Table 1.

Socioeconomic class distribution among the participants (n = 536):

As shown in the Table 2, majority of the participants belongs to upper class (75.2%), followed by upper middle class (12.9%). Middle class and lower middle class comprises 5.4% and 5.8% respectively. Least percentage of division falls to lower class (0.7%).

Age distribution among the participants (n = 536):

As shown in the Table 3, most number of participants belong to age 21 years (37.5%), followed by the age 20 (26.1%). age 19 and 22 contains the percentages 14.6% and 12.7% respectively, followed by the age 18 (3.9%), age 23 (3.7%) and age 24 (1.5%).

Thoughts of suicide distribution among the participants (n = 536):

As shown in the Table 4, majority of the participants replied "NO" to the thoughts of suicide (92.2%) while 7.8% of them replied "YES" to the thoughts of suicide.

Table 1: Gender distribution among participants (N = 536)

Gender	Frequency	Percentage
Female	306	57.1
Male	230	42.9
Total	536	100.0

Table 2: Socioeconomic class distribution among the participants (N = 536)

Socioeconomic class	Frequency	Percentage
Lower class	4	0.7
Lower middle class	31	5.8
Middle class	29	5.4
Upper class	403	75.2
Upper middle class	69	12.9
Total	536	100.0

Table 3: Age distribution among participants (N=536)

Age in years	Frequency	Percentage
18	21	3.9
19	78	14.6
20	140	26.1
21	201	37.5
22	68	12.7
23	20	3.7
24	8	1.5
Total	536	100.0

Table 4: Thoughts of suicide distribution among the participants (N = 536)

Thoughts of suicide	Frequency	Percentage
No	494	92.2
Yes	42	7.8
Total	536	100.0

Table 5: Gender distribution of thoughts of suicide (N = 536)

Gender	Thoughts of ending your life		Total
	No	Yes	
Female	284	22	306
Male	210	20	230
Total	494	42	536

Table 6.1: Numerical valuable that correlate with Age and symptoms of psychological problems among the participants (N = 536)

	Thoughts of ending your life		Somatization		Obsessive compulsive		Interpersonal sensibility		Depression		Anxiety		Anger hostility	
	No	Yes	Not	Somatization	Not	Obsessive compulsive	Not	Interpersonal sensibility	Not	Depression	No	Anxiety	Not	Anger hostility
Age	20	1	19	2	19	2	18	3	19	2	20	1	19	2
18	72	6	71	7	64	14	67	11	63	15	70	8	73	5
19	131	9	131	9	115	25	122	18	116	24	128	12	133	7
20	184	17	184	17	169	32	176	25	165	36	187	14	187	14
21	62	6	64	4	57	11	61	7	56	12	62	6	61	7
22	18	2	19	1	17	3	18	2	17	3	18	2	19	1
23	18	1	7	1	6	2	6	2	5	3	7	1	7	1
24	7	1	7	1	6	2	6	2	5	3	7	1	7	1
Total	492	42	495	41	447	89	468	68	441	95	492	44	499	37

Table 6.2: Numerical valuable that correlate with Age and symptoms of psychological problems among the participants (N=536)

Table 6.12: Numerical variables that correlate with age and symptoms of psychological problems among the participants (N=557)												
Phobic anxiety		Paranoid ideation		Psychotism		Stress			Distressing symptom		Able to do activity	
Not	Phobic anxiety	Not	Paranoid ideation	Not	Psychotism	Low	Middle	High	No	Yes	No	Yes
19	2	19	2	19	2	14	3	4	18	3	18	3
75	3	73	5	68	10	44	24	10	60	18	67	11
130	10	131	9	125	15	76	30	34	108	32	119	21
192	9	188	13	185	16	90	56	55	156	45	169	32
67	1	62	6	57	11	25	19	24	49	19	59	9
20	0	19	1	19	1	7	8	5	15	5	16	4
8	0	8	0	6	2	3	0	5	4	4	5	3
511	25	500	36	479	57	259	140	137	410	126	453	83

Gender distribution of thoughts of suicide (N = 536):

Table 5, shows the distribution of thoughts of suicide among different genders of the participants. Among females, 284 did not have thoughts of suicide and 210 males did not have thoughts of suicide either. Only 22 of the females and 20 of the males responded with the thoughts of suicide.

Test of significance: pearson's correlation

Correlation between age and symptoms of Psychological problems: Table 6.1 and 6.2 gives the numerical value for the correlated data of Age and Symptoms of Psychological problems. Every symptom has been summarized and allotted data is given.

Correlation factor: Considering the Pearson's correlation, according to the data from Table 7, STRESS has a MILD degree of correlation ($r = 0.168$) and fulfils the principle of significance ($p < 0.05$), thus, indicating that stress has a correlation with the age among the participants.

Correlation between gender and symptoms of Psychological problems: The numerical value for the correlation of gender and the symptoms of the psychological problems are shown in the Tables 8.1, 8.2 and 8.3. The data are summarized and tabulated.

Correlation factor: Considering the Pearson's correlation, according to the data from Table 9, the psychological problem Obsessive compulsive have a MILD degree of correlation ($r = 0.099$) and fulfils the principle of significance ($p < 0.05$) and the symptom of Somatization have also a MILD degree of correlation ($r = 0.091$) by fulfilling the principle of significance ($p < 0.05$). Thus, Obsessive compulsive and somatization have a correlation with the gender among the participants (N = 536).

Correlation factor: By Pearson's law of correlation, according to the value from Table 11 there are no significant symptoms that fulfill the value of significance ($p < 0.05$), thus proving NO relation between the class and the psychological symptoms among the participants.

Test of significance: correaltion of coefficients

***Testing correlation between the two significant values of Thoughts of suicide and the symptoms of psychological problems:** Table 12.1, 12.2 and 12.3 show the numerical value for the correlation of thoughts of suicide with symptoms of psychological problems.

Table 7: Correlation of Age and Symptoms of psychological problems among the participants (N = 536)

	Values	Age
AGE	Correlation value (r)	1
	Significance value (p-value)	
Somatization	Correlation value (r)	-0.015
	Significance value (p-value)	0.720
Obsessive compulsive	Correlation value (r)	0.007
	Significance value (p-value)	0.870
Interpersonal sensibility	Correlation value (r)	-0.015
	Significance value (p-value)	0.729
Depression	Correlation value (r)	0.030
	Significance value (p-value)	0.494
Anxiety	Correlation value (r)	0.004
	Significance value (p-value)	0.934
Not able to do day to day activity	Correlation value (r)	0.040
	Significance value (p-value)	0.361
Apperance of distressing symptom	Correlation value (r)	0.064
	Significance value (p-value)	0.139
Stress	Correlation value (r)	0.168**
	Significance value (p-value)	0.0001
Psychotism	Correlation value (r)	0.011
	Significance value (p-value)	0.802
Paranoid ideation	Correlation value (r)	-0.011
	Significance value (p-value)	0.800
Phobic anxiety	Correlation value (r)	-0.077
	Significance value (p value)	0.074
Anger hostility	Correlation value (r)	0.029
	Significance value (p-value)	0.506

Table 8.1: Numerical value for correlation of Gender and Symptoms of psychological problems among the participants (N = 536)

	Somatization		Obsessive compulsive		Interpersonal sensibility		Depression	
	No	Yes	No	Yes	No	Yes	No	Yes
Sex								
Female	289	17	265	41	271	35	248	58
Male	206	24	182	48	197	33	193	37
Total	495	41	447	89	468	68	441	95

Table 8.2: Numerical value for correlation of Gender and Symptoms of psychological problems among the participants (N = 536)

	Anxiety		Anger hostility		Phobic anxiety		Paranoid ideation		Psychotism	
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
Sex										
Female	286	20	287	19	296	10	287	19	281	25
Male	206	24	212	18	215	15	213	17	198	32
Total	492	44	499	37	511	25	500	36	479	57

Table 8.3: Numerical value for correlation of Gender and Symptoms of psychological problems among the participants (N = 536)

	Stress			Distressing symptom		Unable to do daily activity	
	Low	Mild	High	No	Yes	No	Yes
Sex							
Female	150	79	77	235	71	257	49
Male	109	61	60	175	55	196	34
Total	259	140	137	410	126	453	83

Correlation factor: By taking the values from the Table 12, correlation between the thoughts of suicide and symptoms of the psychological problems is calculated by following Pearson's correlation.

From the Table 13, its evident that the symptoms such as depression, anxiety and psychotism contains correlation value (r) of 0.501, 0.520 and 0.553 depicting that these symptoms have a strong relationship towards the thoughts of suicide among the participants and p values fulfill the significance ($p < 0.05$).

Symptoms like somatization, obsessive compulsive, interpersonal sensibility, apperance of

distressing symptom, paranoid ideation, phobic anxiety, anger hostility contains the value of correlation (r) of 0.465, 0.448, 0.431, 0.330, 0.421, 0.429, 0.441, respectively showing they are having a moderate relation towards the thoughts of suicide among the participants by fulfilling the value of significance ($p < 0.05$).

The remaining symptoms of psychological problems, not able to do day to day activity stress are having the correlation value of 0.278, 0.231 respectively showing that they have an low level relation for the thoughts of suicide among the participants (N = 536) by fulfilling the value of significance ($p < 0.05$).

Table 9: Correlation between Gender and Symptoms of psychological problems among the participants (N = 536)

	Value	Sex
Sex	Coefficient correlation (r)	1
	Significance value (p)	
Thoughts of ending your life	Coefficient correlation (r)	0.028
	Significance value (p)	0.522
Somatization	Coefficient correlation (r)	0.091*
	Significance value (p)	0.035
Obsessive compulsive	Coefficient correlation (r)	0.099*
	Significance value (p)	0.021
Interpersonal sensibility	Coefficient correlation (r)	0.043
	Significance value (p)	0.317
Depression	Coefficient correlation (r)	-0.037
	Significance value (p)	0.391
Anxiety	Coefficient correlation (r)	0.070
	Significance value (p)	0.104
Anger hostility	Coefficient correlation (r)	0.032
	Significance value (p)	0.466
Phobic anxiety	Coefficient correlation (r)	0.076
	Significance value (p)	0.077
Paranoid ideation	Coefficient correlation (r)	0.023
	Significance value (p)	0.589
Psychotism	Coefficient correlation (r)	0.092*
	Significance value (p)	0.033
Stress	Coefficient correlation (r)	0.015
	Significance value (p)	0.725
Apperance of distressing symptom	Coefficient correlation (r)	0.008
	Significance value (p)	0.848
Not able to do day to day activity	Coefficient correlation (r)	-0.017
	Significance value (p)	0.697

Table: 10 Correlation between socioeconomic class and symptoms of psychological problems among the participants (N = 536)

	Thoughts of ending your life		Somatization		Obsessive compulsive		Interpersonal sensibility	
	Not	Yes	Not	Yes	Not	Yes	Not	Yes
Class								
Upper class	367	36	372	31	332	71	352	51
Upper middle class	67	2	65	4	59	10	60	9
Lower middle class	28	3	29	2	27	4	27	4
Middle class	28	1	26	3	26	3	26	3
Lower class	4	0	3	1	3	1	3	1
Total	494	42	495	41	447	89	468	68

Table 11: Correlation between socio economic class and Symptoms of psychological problems among the participants (N=536):

	Values	Class
Class	Correlation value (r)	1
	Significance value (p-value)	
Thoughts of ending your life	Correlation value (r)	-0.058
	Significance value (p value)	0.181
Somatization	Correlation value (r)	0.025
	Significance value (p-value)	0.568
Obsessive compulsive	Correlation value (r)	-0.045
	Significance value (p-value)	0.302
Interpersonal sensibility	Correlation value (r)	0.002
	Significance value (p-value)	0.963
Depression	Correlation value (r)	0.003
	Significance value (p-value)	0.946
Anxiety	Correlation value (r)	0.014
	Significance value (p-value)	0.750
Not able to do day to day activity	Correlation value (r)	0.010
	Significance value (p-value)	0.811
Apperance of distressing symptom	Correlation value (r)	-0.070
	Significance value (p-value)	0.106
Stress	Correlation value (r)	-0.050
	Significance value (p-value)	0.244
Psychotism	Correlation value (r)	0.015
	Significance value (p-value)	0.737
Paranoid ideation	Correlation value (r)	0.002
	Significance value (p-value)	0.956
Phobic anxiety	Correlation value (r)	0.051
	Significance value (p-value)	0.238
Anger hostility	Correlation value (r)	-0.026
	Significance value (p-value)	0.543

Table 12.1: Numerical value for correlation between the thoughts of suicide and symptoms of psychological problems among the participants (N = 536)

	Somatization		Obsessive compulsive		Interpersonal sensibility		Depression	
	Not	Yes	Not	Yes	Not	Yes	Not	Yes
Thoughts of suicide								
No	474	20	436	58	452	42	434	60
Yes	21	21	11	31	16	26	7	35
Total	495	41	447	89	468	68	441	95

Table 12.2: Numerical value for correlation between the thoughts of suicide and symptoms of psychological problems among the participants (N=536)

Anxiety		Anger hostility		Phobic anxiety		Paranoid Ideation		Psychotism	
Not	Yes	Not	Yes	Not	Yes	Not	Yes	Not	Yes
474	20	476	18	484	10	476	18	466	28
18	24	23	19	27	15	24	18	13	29
492	44	499	37	511	25	500	36	479	57

Table 12.3: Numerical value for correlation between the thoughts of suicide and symptoms of psychological problems among the participants (N = 536)

Stress			Distressing symptom		Not able do daily activity	
Low	Mild	High	No	Yes	No	Yes
252	130	112	398	96	432	62
7	10	25	12	30	21	21
259	140	137	410	126	453	83

Table 13: Correlation between thoughts of suicide and symptoms of psychological problems among the participants (N = 536)

	Values thoughts of ending your life
Thoughts of ending your life	Correlation value (r) 1
	Significance value (p-value)
Somatization	Correlation value (r) 0.465**
	Significance value (p-value) 0.0001
Obsessive compulsive	Correlation value (r) 0.448**
	Significance value (p-value) 0.0001
Interpersonal sensibility	Correlation value (r) 0.431**
	Significance value (p-value) 0.0001
Depression	Correlation value (r) 0.501**
	Significance value (p-value) 0.0001
Anxiety	Correlation value (r) 0.520**
	Significance value (p-value) 0.0001
Not able to do day to day activity	Correlation value (r) 0.278**
	Significance value (p-value) 0.0001
Apperance of distressing symptom	Correlation value (r) 0.330**
	Significance value (p-value) 0.0001
Stress	Correlation value (r) 0.231**
	Significance value (p-value) 0.0001
Psychotism	Correlation value (r) 0.553**
	Significance value (p-value) 0.0001
Paranoid ideation	Correlation value (r) 0.421**
	Significance value (p-value) 0.0001
Phobic anxiety	Correlation value (r) 0.429**
	Significance value (p-value) 0.0001
Anger hostility	Correlation value (r) 0.441**
	Significance value (p-value) 0.0001

*Red: Strong relation. *Orange: Mild realtion. *Purple: Low relation

DISCUSSION

Among the participants, majority of them were females (57.1%) while males constituted 42.9% of our study population. In our study, we found no statistical difference between males and females with respect to suicidal ideation, however it is in contrast to study done by Goyal *et al.*^[2] and Sharma *et al.*^[17] which showed a significant difference between males and females with respect to suicidal ideation.

With regards to the thoughts of suicide, 7.8% of participants replied YES to the thoughts of suicide and 92.2% of the participants replied "NO" to the thoughts of suicide (92.2%). This is close to findings of a study done by Amelia *et al.*^[18] which showed an estimated 6% of students having suicide ideation.

In our study population, 48.32% (n = 259) experienced low level stress, 26.12% (n = 140) of the population experienced medium level stress, 25.56% (n = 137) of the population experienced high level stress, 23.51% (n = 126) of the population had appearance of distressing symptoms, 15.49% (n = 83) of the population had difficulty in doing day to day activity. In our study, stress has a MILD degree of correlation (r = 0.168) and fulfils the principle of significance (p<0.05), thus, indicating that stress has a correlation with the age among the participants with respect to suicidal ideation. This is in accordance with a study done by Anna Rosiek *et al.*^[19].

The results of the study by Rosiek *et al.*^[19] confirmed a relation of chronic stress and anxiety to

suicidal thinking in medical students However contrasting results were given by a Malaysia study²⁰ which revealed that anxiety and stress were not found to be predictors of suicidal ideation.

In our study, somatization, obsessive compulsive, interpersonal sensibility, appearance of distressing symptom, paranoid ideation, phobic anxiety and anger hostility contains the value of correlation (r) of 0.465, 0.448, 0.431, 0.330, 0.421, 0.429, 0.441 respectively showing they are having a moderate relation towards the thoughts of suicide among the participants by fulfilling the value of significance ($p < 0.05$).

In our study, depression, anxiety and psychotism contains correlation value (r) of 0.501, 0.520 and 0.553 depicting that these symptoms have a strong relationship towards the thoughts of suicide among the participants and p-values fulfill the significance ($p < 0.05$). This is similar to study done by Polanco-Roman *et al.*^[21] in which Pearson correlations demonstrated a significant, positive relation between suicidal ideation and stress-related symptoms, suicidal ideation and depressive symptoms

In our study we found that 7.6% (n = 41) of the population had symptoms of somatization, 12.69% (n = 68) of the population had symptoms of interpersonal sensibility, 16.6% (n = 89) of the population had symptoms of obsessive compulsive disorder, 17.72% (n = 95) of the population has symptoms of depression, 8.21% (n = 44) of the population has symptoms of anxiety, 6.90% (n = 37) of the population has symptoms of anger hostility, 4.66% (n = 25) of the population had symptoms of phobic anxiety, 6.72% (n = 36) of the population had symptoms of paranoid ideation, 10.63% (n = 57) of the population had symptoms of psychotism.

CONCLUSION

Among the participants, 7.8% of them replied yes to the thoughts of suicide. From our study, we conclude that "the thoughts of ending their life" and the symptoms of depression, anxiety, psychotism has a strong relationship. The symptoms of somatization, obsessive compulsive, interpersonal sensibility, paranoid ideation, phobic anxiety, anger hostility shows moderate relation towards the thoughts of suicide among the participants. Stress has a mild degree of correlation.

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