



CODEN [USA]: IAJPBB

ISSN: 2349-7750

INDO AMERICAN JOURNAL OF PHARMACEUTICAL SCIENCES

<http://doi.org/10.5281/zenodo.3124453>

Available online at: <http://www.iajps.com>

Research Article

MEDICAL STUDENTS AND FORETELLER INDICATIONS OF SUICIDAL TENDENCIES ALONG WITH COPING STRATEGIES: A CROSS-SECTIONAL ASSESSMENT

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Article Received: March 2019

Accepted: April 2019

Published: May 2019

Abstract:

Objective: The objective of the research was to determine the coping strategies as positive as well as a negative foreteller of suicidal attention among the students of medical colleges.

Method: This cross-sectional research was carried out at Mayo Hospital, Lahore from March to December 2018. The age of the student was in between nineteen to twenty-five years. The researcher used various level mixed techniques for a specimen as well as two standardizes scales with the objective of determining suicide attentions and coping mechanism of the subjects.

Result: Total number of the students enrolled for research was twelve hundred. The number of male and female students was six hundred and forty (53%) and five-hundred and sixty (47%) respectively. Three hundred and ninety students (32%) belong to Gujarat whereas eight hundred and ten subjects (68%) from Lahore. The adverse foreteller of suicide attentions were usage of emotive assistance ($P < 0.05$), active coping ($P < 0.0001$), instrumental assistance ($P < 0.001$), suicide ($P < 0.05$), categorical reframing ($P < 0.0001$), scheduling ($P < 0.001$), gratification ($P > 0.05$), acknowledgement ($P < 0.001$) and religion ($P < 0.0001$); whereas, rejection ($P < 0.0001$), material usage ($P < 0.05$), self-criticism ($P < 0.0001$) and venting ($P > 0.05$) were affirmative forecaster of suicide attentions.

Conclusion: The recommendation of the research was that the course based on psychological education for the students of medical colleges must be introduced to facilitate them to choose the appropriate coping mechanism with the objective of better dealing in stressful conditions.

Keywords: Suicidal Behavior, SBQ-R (Suicide Behavior Questionnaire-Revised), BCI (Brief Cope Inventory).

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Please cite this article in press Muhammad Hashim et al., *Medical Students and Foreteller Indications of Suicidal Tendencies Along With Coping Strategies: A Cross-Sectional Assessment.*, Indo Am. J. P. Sci, 2019; 06(05).

INTRODUCTION:

The stubborn type of course study and frantic academic activities exert extra burden on students of medical colleges and provide them very fewer chances to ease and programmed for entertainment which may advance to psychological distress, anxiety and other health as well as psychological issues [1, 2]. Causes such as the tension of failure, regular tests, prolong the course of study, as well as additional mental and health issues, become consequences of depression which directed the subjects towards suicide attention [3, 5]. The action of willingly putting oneself to expiration is called suicide. The suicide attitude comprehends suicidal attentions, arrangement and commit. A number of people having attention as well as the desire of assassinating themselves does not attempt suicide however they are at huge chances of eliminating their life by their own [6]. The literature presented a dreadful ratio of stress and suicide attentions among students of the medical colleges throughout the world [4, 5, 7]. The 2nd general most factor of demise among students of medical colleges as well as experts is suicide, after the incident [8, 9]. Physician showed a superior level of suicide thoughts and attitude with respect to students of medical colleges. The very active schedule and pressure of care for their patients could not allow them to get appropriate care for themselves as well as their hard schedule does not permit them to free appropriate quantity of time for ease and entertainment [8]. Fresh research carried out at the USA presented that eleven percent students of medical college commit suicide. It additionally presented that student of medical colleges, as well as medical specialists, are at huge risk for suicide attentions and psychological distress with respect to the common population [9]. Uniformly other researches carried out at Canada identified suicide thoughts in eleven percent of medical colleges students of whom just sixteen percent get treatment for relief of their symptoms [10]. Freshly, dreadful increase in suicide among students of medical colleges as well as specialists has been recorded in Pakistan [11]. Multiple research has been conducted on suicide attitude among students of medical colleges in developed states however this problem has been minor investigated in developing states such as Nepal, Pakistan and India. Medical college's students of this particular locality confronted multiple social issues beside academic pressure which additionally advanced to suicide attitude [12, 14]. Coping mechanism is behavioural as well as intellectual struggles used to keep up balanced in the inner and outer requirements of an individual and to handle with maladaptive along with sentimental irritants [15, 16]. Dynamic as well as reserved coping

are two broad types of coping that have been utilized to encounter psychological distress, however, disavowal intoxicant/dose used and behavioural detachments are covered in reserved or avoidant coping mechanism [14, 16]. However, it has been recommended that each coping technique must be studied to get familiarization with the design of coping strategies of individuals.

In research, the medical students were demanded to maintain data of their failure, their selected coping mechanism along with contentment level every day for three to fourteen days. The outcomes displayed that the diversely used self-censure, behavioural detachment, passionate and instrumental assistance, denial, suicide, emission, the material used presented a huge level of disappointment [15]. Reserved coping mechanism is an additional hazardous element for detrimental feedback to anxious life incidents and is noted higher in males as compared to females. This negative feedback, suicide attention is more usual [15]. Uniform findings have been presented by one additional research performed on the despondency and apprehension level of military experts. The superior degree of anxiety and speculate anxiety complication was noted among the experts that used refusal and reserved or avoidant coping mechanism to decrease their tension whereas the contestants just with social assistance and used planning and issues resolving technique presented expressively inferior level of anxiety and psychological disorder [16].

Conclusively, coping mechanism as inward and behavioural struggle are being utilized to overcome, endure or decrease depression incidents [15, 16]. Utilization of impressive and suitable coping may lessen the influence of freshly confronted anxious condition which additionally minimizes the incidence of psychological health issues and literature displayed that coping mechanisms can be learnt [17]. In the world, medical carrier executes a vital role in the psychological and physical health of any community. Resultantly medical students, as well as experts, own psychological and physical health is much important. While exacting and boisterous span of their training and study they are required to understand and use positive and useful methods to overcome their depression, resultantly they become more valuable not only for themselves but also for the whole community as we know that the demise of a single medical specialist is ultimately the death of thousands of those patients who were being cured by that physician [11]. Latest researches have established that drugs become ineffective due to prolong time usage by tension and depression patients. Therefore, coping techniques are world

widely used to overcome depression, tension and psychological disorder [17].

The objective of the research was to determine the coping strategies as positive as well as a negative foreteller of suicidal attention among the students of medical colleges.

SUBJECT & METHOD:

This cross-sectional research was carried out at Mayo Hospital, Lahore from March to December 2018. Three medical colleges of public sector situated at Lahore and Gujarat of Punjab province in Pakistan was selected for research as well as the age of the student was in between nineteen to twenty-five years. The recommendation was taken from an organizational review panel of Gujarat University as well as written approval was also taken from the principal of participating medical colleges prior to data collection. Permission was also granted by the participating members on demand. The researcher used various level mixed techniques for the specimen. Initially, two cities were chosen expediently and at the 2nd level by objective, entire medical colleges run by the government in the chosen city were solicited for collection of data. At the 3rd level, probability proportionate stratified strategy was used and students of each participant medical college were divided into two categories on the basis of gender. At the 4th level, the volume of the specimen was decided from both the sections (male and female) from three medical colleges. The balanced specimen volume was measured with the assistance of mathematical formula $n = N/1+N(e)2$ with ninety-five percent of confidence level [18]. Demographic data of the participating student was acquired on a self-formulated form. With the purpose of evaluating the suicide attitude, an absolute mechanism, SBQ-R was managed. It consists of 4 elements used for evaluating suicide thoughts, planning an attempt. This scale has better reliability, effectiveness to evaluate suicide attentions in both depressed and non-depressed students. The measured alpha effectiveness for depressed patients is 0-87 and for 0-76 for undergraduate students [19].

Moreover, BCI was used to calculate the coping mechanism of medical college's students. Brief cope inventory is four-point liker type scales. It comprises of fourteen subscales and twenty-eight elements. α 0.50 to α 0.73 are the ranges of the subscales of alpha authenticity. These fourteen points (subscales) are actually showing fourteen distinct and free coping mechanism. They are distractions: distraction ones thinking from the anxious incident by getting tangled

something. Dynamic or Active coping: demeanour as well as intellectual attempts by utilizing their self-resources. Denial: ones deny to undergoing the condition which is hard to manage. Substance abuse: noxious material which might be impaired physical and psychological health. Emotional assistance: to achieve attention, acknowledgement, love and care, rapport, believe and support for others. Instrumental assistance: amenities, commodities, monetary assistance from others. Behavioural detachment: administration of the organization for craving results by preventing to confront the situation. Positive reframing: revolutionize thoughts by assuming the effects in a positive way. Venting: to research or share anxious incidents with others. Planning: actively organizing and managing obstacles to achieve craving objectives. Humour: try to entertain others with one's conversation. Acceptance: one's agreement to any condition. Religion: exertion with respect to benchmark and ethnic system that links with supernatural. Self-blame: an intellectual procedure through which an individual associate the appearance of the tense incident to oneself.

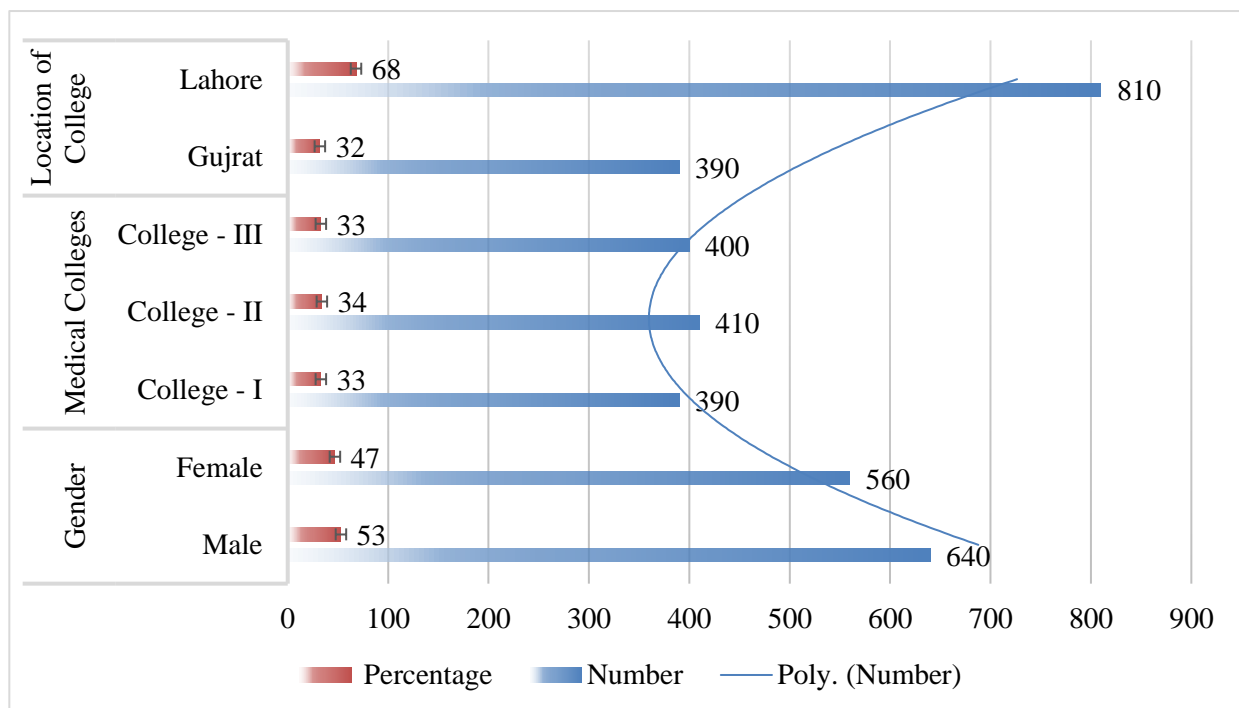
RESULTS:

A total number of the students enrolled for research was twelve hundred. The number of male and female students was six hundred and forty (53%) and five-hundred and sixty (47%) respectively. Three hundred and ninety students (32%) belong to Gujarat whereas eight hundred and ten subjects (68%) from Lahore. The adverse foreteller of suicide attentions were usage of emotive assistance ($P<0.05$), active coping ($P<0.0001$), instrumental assistance ($P<0.001$), suicide ($P<0.05$), categorical reframing ($P<0.0001$), scheduling ($P<0.001$), gratification ($P>0.05$), acknowledgement ($P<0.001$) and religion ($P<0.0001$) whereas rejection ($P<0.0001$), material usage ($P<0.05$), self-criticism ($P<0.0001$) and venting ($P>0.05$) were affirmative forecaster of suicide attentions.

Of the demographic variants, age was positive but inconsiderable foreteller along with gender as a negative but frail forecaster of suicide attitude. As gender was duality variant so a dummy variant where male and female were given 0 and 1 respectively. Women in suicide attitude were eight-point inferior but the contrast was important ($p<0.05$) only at the initial point as well as unimportant at the 2nd stage when the coping mechanism was recorded. Categorical regression was also practised on additional demographic aspects such as monthly earnings.

Table – I: Demographic Features

Demographic Characteristics		Number	Percentage
Gender	Male	640	53
	Female	560	47
Medical Colleges	College – I	390	33
	College – II	410	34
	College – III	400	33
Location of College	Gujrat	390	32
	Lahore	810	68

**Table – II:** Hierarchical Regression analysis on coping strategies to indicate suicidal ideas

Variables	Model – I		Model – II	
	B	B	B	B
Constant	29.41		2.75	
Age	0.1	0.11	0.06	0.05
Monthly income of family	-0.02	-0.04	-0.01	-0.02
Gender	-8.85	-0.15	-1.86	0.03
Self-distraction			-0.61	-0.12
Active Coping			-3.02	-0.45
Denial			1.09	0.37
Substance use			0.78	0.26

Use of emotional support			-1.77	-0.14
Use of instrumental support			-0.53	-0.06
Behavioural disengagement			0.25	0.08
Venting			0.06	0.05
Positive reframing			-0.79	-0.16
Planning			-0.99	-0.74
Humour			-0.2	-0.47
Acceptance			-0.54	-0.12
Religion			-0.47	-0.098
Self-blame			0.19	0.057
R2	0.2		0.79	
F	40.18		101.09	
DR ²	0.18		0.74	

DISCUSSION:

The research recognized suicide, use of active or dynamic coping, positive reframing, sentimental and instrumental assistance, religion and scheduling as preventive and negative coping strategies of suicide attention among students of the medical college. In addition, the application of these coping mechanism decreases the hazard of suicide attitude of medical students. Latest research indicated that effort to achieve pity, attention and love along with monetary support in additional help from others to deal the anxious condition expressively decrease the stress and enhance the possibility of adjustability [21]. Simply the usage of dynamic (active), tangible and sentimental assistance scheduling, religion and positive reframing or inversely connected with suicide attitude of medical college students. The findings are similar to the outcomes of an earlier study [15, 22, 23]. One additional strong coping strategy is positive reframing through which thinking and sentiments are restructured by the students in a qualitative way. The results of the fresh research diagnosed positive reframing as a powerful preventive coping strategy among students of medical colleges. Planning, active coping and positive reframing were identified to be linked with adjustability and better results. The findings are uniform with the earlier results in which scheduling or planning and issue solving are connected with minor tension with respect to avoiding coping connected to a huge level of suffering [22]. Uniformly the utilization of disposition, acknowledgement and positive reframing play vital roles in minimizing routine life depression. Moreover, subjects with greater idealism who applied to reframe presented a huge level of contentment

[15]. The finding of the present research is associating with the earlier research on military experts which finalized that those medical colleges students used denying as well as an avoidant coping mechanism to handle routine life stress presented greater huge level of tension speculates anxiety complication. The subjects who used the coping technique of issue solving and had social assistance recorded an inferior degree of psychological distress and tension. Moreover, demeanour detachment, self-criticism, venting and denial revealed to be inefficacious and positive foreteller of suicide attention among students of medical colleges in the present research. Uniform findings were presented by earlier researches [15 – 20]. These findings are also consonant with the fresh research which diagnosed that highly stressed subjects used venting and intentional detachment with reference to the participant with minor tension who reported to utilized instrumental assistance, positive reframing and active coping strategies [14]. It is very much clear that students who select these mechanisms and makes efforts to familiar and restructure the issues with the objective of its solution whereas demeanour detachment, refusal, venting and self-criticism are a negative coping mechanism which is not beneficial for its applicant in a solution of complications.

Monthly earning and age are unfamiliar foreteller of suicide attitudes and its shows that coping mechanism performed a sound role in suicide attentions of medical college's students without any discrimination of monthly earning and age. However, monthly earning appeared as negative and age as a positive foreteller of suicide attentions. The findings are uniform with the earlier research findings which

presented a huge degree of depression which increases with age among those medical students who belong to the middle class or having fewer financial resources [14]. The families having minor financial resources feel stress due to huge expenses of medical education is conceivable clarification. However, gender emerged as a weak and unexpressive foreteller of suicide attentions, the present research findings presented that on suicide attitude males scored higher with respect to females. These findings are assisted with earlier research findings [24]. Males in our society perform the role of head of the family and responsible for entire needs of his family so males tolerate huge social pressure with respect to females which might advance them to towards depression and suicide attentions.

Therefore our research approved the inclusion of program based on psychoeducation and executed through consultants for medical students which might be useful for them to select suitable coping strategy with respect to their stress and additional researches must be carried out to find out the expansion and elements of suicide attentions on wide scale among medical students and experts so that efficient and precautionary program may be prepared.

CONCLUSION:

Active coping, scheduling, positive reframing and acknowledgement can minimize the chance of suicide attention whereas attitudinal detachment, denial and venting are inverse coping strategies which extended the chances of suicide attentions.

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