Assessment Of Anxiety, Depression And Stress Among Medical Students

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Abstract

Background: Stress is a biopsychosocial model that refers to the consequence of the failure of an organism to respond adequately to mental, emotional, or physical demands. The present study was conducted to assess anxiety, depression and stress among medical students.

Materials & Methods: 290 medical students of both genderswere administered demographic questionnaire and scales such as DASS-21 for assessment of anxiety, depression and stress among medical students.

Results: Out of 290 subjects, males were 120 and females were 170. Depression was normal in 35, mild in 45, moderate in 60, severe in 100 and extreme severe in 50 subjects. The difference was significant ($P< 0.05$). Anxiety was mild in 60, moderate in 56, severe in 110 and extreme severe in 10 subjects. The difference was significant ($P< 0.05$). Stress was mild in 66, moderate in 70, severe in 84 and extreme severe in 6 subjects. The difference was significant ($P< 0.05$).

Conclusion: Medical students had high level of depression, anxiety and stress. The reason can be the pressure of studied.

Keywords: Medical students, depression, anxiety, stress.

Introduction

Stress is a biopsychosocial model that refers to the consequence of the failure of an organism to respond adequately to mental, emotional, or physical demands. Clinically, anxiety is characterized by intense feelings of dread, accompanied by somatic symptoms that indicate a hyperactive autonomic nervous system, whereas depression manifests as loss of interest or pleasure, sadness, feelings of guilt or low self-worth, disturbed sleep or appetite, extreme tiredness, and poor concentration.

The diagnostic and statistical manual of mental disorders, fifth edition has defined symptoms for depression; this includes depressed moods, psychomotor agitation or retardation, diminished interest or pleasure, insomnia, fatigue or loss of energy, diminished ability to concentrate, significant weight loss, feelings of worthlessness or excessive guilt, and recurrent thoughts of death.[3] Individuals exhibiting five or more of those symptoms meet the criteria for major depressive disorders.[4]

Anxiety is contemplated as a state of uneasiness, it's a bodily response to a perceived danger that could be real or imaginary and triggered by an individual's thoughts, beliefs and feelings. Low anxiety levels are adaptive and can provide the motivation required for survival. But it becomes troublesome when the individual is unable to prevent the anxiety from escalating to a level that interferes with the ability to meet basic needs.The present study

was conducted to assess anxiety, depression and stress among medical students.

Materials & Methods

The present study comprised of 290medical students of both genders. All gave their written consent for the participation in the study.

Data such as name, age, gender etc. was recorded. All were administered demographic questionnaire and scales such as DASS-21 for assessment of anxiety, depression and stress among medical students.Data thus obtained were subjected to statistical analysis. P value < 0.05 was considered significant.

Results

Table I Distribution of subjects

Total- 290		
Gender	**Males**	**Females**
Number	120	170

Table I shows that out of 290subjects, males were 120 and females were 170.

Table II Assessment of depression

Depression	**Number**	**P value**
Normal	35	0.02
Mild	45	
Moderate	60	
Severe	100	
Extreme severe	50	

Table II shows that depression was normal in 35, mild in 45, moderate in 60, severe in 100 and extreme severe in 50 subjects. The difference was significant (P< 0.05).

Table III Assessment of anxiety

Anxiety	**Number**	**P value**
Normal	54	0.05
Mild	60	
Moderate	56	
Severe	110	
Extreme severe	10	

Table III, graph I shows that anxiety was mild in 60, moderate in 56, severe in 110 and extreme severe in 10 subjects. The difference was significant (P< 0.05).

Table IV Assessment of stress

Stress	**Number**	**P value**
Normal	64	0.05
Mild	66	
Moderate	70	
Severe	84	
Extreme severe	6	

Table IV, graph I shows that stress was mild in 66, moderate in 70, severe in 84 and extreme severe in 6 subjects. The difference was significant (P< 0.05).

Discussion

Depression, Anxiety, and Stress Scale 21 has a stable and clear factor structure which is established by either analyzing items obtained from participants' ratings of DASS21 or examining factor structure from direct ratings of DASS-21. One of the instruments employed widely to measure psychosocial functioning is Strengths and Difficulties Questionnaire (SDQ).[5] The scale measures five distinct domains of psychosocial adjustment among adolescents namely: Hyperactivity/inattention, emotional symptoms, conduct problems, peer problems, and pro-social behavior SDQ's subscales are found to be (a) conceptually meaningful, (b) consistent with current knowledge of comorbidity, and (c) indicative of distinct constructs. The present study was conducted to assess anxiety, depression and stress among medical students.

We found that out of 290 subjects, males were 120 and females were 170.Melaku et al determined the prevalence and severity of depression, anxiety, and stress as well as coping strategies used by medical undergraduate studentsCurrent prevalence rates of depression, anxiety, and stress were 52.3%, 60.8%, and 40.4%, respectively& proportion of respondents who had extremely severe symptoms of depression, anxiety, and stress was 6.2%, 16.2%, and 2.3%, respectively. Depression was specifically associated with monthly income and residency. Anxiety was

significantly associated with residency and educational level. Stress was associated with monthly income, educational level, and residency. &e main coping strategy adopted by the respondents was religion with a mean of 5.94 and coping mechanisms of denial, substance use, behavioral disengagement, venting, and self-blame were significantly associated with depression, anxiety, and stress. We observed that depression was normal in 35, mild in 45, moderate in 60, severe in 100 and extreme severe in 50 subjects. SmrutikaKaranjkar assessed prevalence of depression, anxiety and stress levels on DASS21 Scale. The sample size comprises of 184 students of first year from Medical Courses in Miraj including both Males and females of odd (92) and even (92) batch. The result proves that presence of Depression, Anxiety and Stress were seen clinically and statistically significant in intra-batches. The mean value of depression, anxiety and stress indicated mild depression in even Batch whereas moderate to severe in Odd Batch. Even batch has mild to moderate anxiety and severe to extremely severe is seen in Odd batch. Stress observed is mild to moderate in odd as well as in even batch.

We found that anxiety was mild in 60, moderate in 56, severe in 110 and extreme severe in 10 subjects. We found that stress was mild in 66, moderate in 70, severe in 84 and extreme severe in 6 subjects. Tabassum et al found that anxiety was seen in 133 (47.7%) students and depression was found in 98 (35.1%), whereas both were found in 68 (24.37%) of students. When academic stressors are concerned, academic performance especially in the First Professional, examination criteria dissatisfaction and being overburdened with test timetable were significantly associated with anxiety.

Ayat R. Abdallah, et al found that psychological illnesses in the form of depression, anxiety, and stress have been reported in substantial proportion of first year medical students at Menoufiya University; depression has been reported in 63.6% of students, while anxiety and stress were seen in 78.4 and 57.8%, respectively. Organized interventions should be initiated to avert excessive psychological illness among medical students. Stress reduction program could be provided regularly as integrated part of their curriculum. The odd batch students must also be taken into consideration for such programs. The limitation the study is small sample size.

Conclusion

Authors found that medical students had high level of depression, anxiety and stress. The reason can be the pressure of studied.

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