

# Assessment of Depression and General Psychopathology in Students of Private Sector Medical Universities in Karachi, Pakistan.

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#### Research Article

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#### **Abstract**

**Objective:** This study is designed to assess the prevalence of depression and psychogenic disorders in students in private sector medical universities in Karachi, Pakistan.

**Background:** Residents in Karachi are constantly exposed to conditions of insecurity, dense population, poor traffic conditions and socioeconomic distress. The features of depressed mood, feeling of guilt, suicidal tendency, agitation, hypochondriasis, weight loss, depersonalization and derealization has been evaluated and assessed.

**Results:** The most prevalent psychogenic conditions were depressed mood (80%) and guilt (67%) assessed with varying degrees of severity. The least prevalent symptom is suicidal tendency (10%) followed by depersonalization and derealization (23.3%).

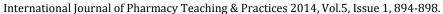
**Conclusion:** Disoriented pychological status presented at young age is a difficult and complicated situation and requires measures for the provision of appropriate consultancy and treatment, to help the students to cope with the condition and underlying circumstances.

Keywords: Depression, Guilt, Hypochondriasis, weight loss.

## Introduction

Most prevalent psychological disorders depression and anxiety categorized as: "neurotic, stress-related and somatoform disorders" and "mood disorders" <sup>1</sup>. Importance of psychological and behavioral disorders in community health is well established, as they are considered to be the most significant basis of morbidity in general care settings leading to extensive disability <sup>2,3</sup> , poverty and socioeconomic problems. They are important factors causing emotional distress which have been described in the explanatory models of persons suffering from common psychological disorders<sup>4,5,6</sup>. Several rating scales purporting to assess the clinical construct of depression are developed<sup>7</sup>. The major classificatory systems - DSM-III-R8 and ICD- 10 have produced definitions of clinical depressive disorders which are largely based on the presence of certain symptoms or signs. HAMD is a validated scale to assess several psychogenic ailments <sup>9</sup>. Standardized interview instruments are employed such as the Research Diagnostic Criteria and the Schedule for Affective Disorders and Schizophrenia<sup>10</sup>.

Majority of the duration of intellectual disorders have first beginning during or shortly before the typical college age<sup>11</sup>, and these issues may be impulsive or aggravated by the variety of stresses in college life, which may include disturbed sleep patterns, change in personal relationships, and academic pressures<sup>12</sup>. Universities are well placed to endorse mental health among young people because they cover several important aspects of students' lives i.e. academics, social networks, health services, residences, and extracurricular activities<sup>13</sup>. Enhanced experiences of shame during early teenage years were associated with depressive symptoms in later adolescence<sup>14</sup>. Guilt is a highly adaptive sensation when it serves to continue the interdependencies and attachments that are necessary for relaxed and productive lives. Though, it may become unreasonable and maladaptive when it is overstressed and reduced, or when it is widespread or repeatedly linked to guilt<sup>15</sup>. Depression has been steadily identified as a danger factor for suicide in adolescence and young adults 16.



The maximum suicide rates were found between students over the age of 25 and those enrolled in graduate school. The suicidal rate assessed in undergraduate females was approximately a third that of undergraduate males<sup>17</sup>. The psychiatric condition most closely correlated with adolescent suicide is the presence of a mood disorder<sup>18</sup>. Depression has a considerable impact on an individual's capability to execute life activities<sup>19</sup>. It presents with depressed mood, poor attentiveness, loss of interest or happiness, disturbed sleep or desire for food, feelings of shame or low self-worth, low energy, and affinity to suicide, which can be present in anybody regardless of age, gender, race, or socio-economic status<sup>20</sup> .Anxiety and Depression are often co morbid disorders<sup>21,22</sup>. An approximated 60% of adults with depression have had an anxiety disorder and up to 40% of adults with anxiety disorders have had depression<sup>23</sup>. Atypical depression, characterized by enhanced desire for food, increase in sleep tendency, and reduced activity level, is more common in women than men<sup>24</sup>.

# **Material and Method**

The research project invite entitled "Demons inbreeding the young psyche – Assessment and awareness" was advertised on the notice board of two private sector universities following institutional approval. The purpose of the study was defined on the pamphlet. The students contacted the principal investigator through email and enrolled in the study after informed consent. A self-structured questionnaire adapted from Hamilton rating scale for depression (DSM IV) was administered in respective university campus. The close ended items of the questionnaire are shown in Table 1. Table 2 shows the characteristics of the study participants. The questionnaire was filled by healthcare professionals (psychoanalysts / pharmacists/ physicians) with the data obtained by the respondents. The results are expressed in counts and frequencies.

### **Results**

The demographic features/ characteristics of the respondents are shown in Table 1. Initially 350 students were enrolled in the study, three questionnaires were excluded due to incomplete information. Four students were absent and three students chose to withdraw from the study. Data was assessed for 340 students from two private sector universities from first, second, third and fourth professional year of education. The grading criteria for each symptom are shown in Table 2. The frequency and severity of each symptom is shown in Figure 1. Suicidal tendency is the least prevailing symptom assessed in the students, however approximately 3% students showed severe tendency of hopelessness, worthlessness and suicide. The most severe symptoms were assessed with comparative higher frequency as depressed mood, guilt feeling and agitation. Mild symptoms of depressed mood, guilt feeling and hypochondriasis were assessed in approximately 33% students. Grade 3 hypochondriasis was also revealed in 10% students.

Table 1 Characteristics of study respondents

Features	count	Percentage (%)		
6 1	Male	156	45.88	
Gender	Female	184	54.11	
Study year	First year	82	24.11	
	Second	80	23.52	
	year			
	Third year	78	22.94	
	Fourth year	100	29.41	
Socioeconomic status	Lower middle class	59	17.35	
	Middle Class	158	46.47	
	Higher Middle Class	100	29.41	
	Elite Class	23	6.76	
BMI score	Under weight	68	20	
	Normal	191	56.17	
	Over weight	43	12.64	
	Obese	38	11.17	
C.G.P.R.	Below 2.5	188	55.29	
(In all previous courses)	Above 2.5	152	44.70	

# **Discussion and Conclusion**

Several students are presented with sustained depressed mood, agitation and feeling of guilt. Apart many well defined academic socioeconomic stressors <sup>25</sup> in the society, the students attribute the condition majorly on difficulties in studies due to lack of electricity at home specially in study hours. Many students feel tired and drained after lengthy study hours and do not engage in physical activities or sports which are otherwise helpful in reducing stress and depression <sup>26</sup>. Agitation and low self-esteem was observed in few students. Lack of tolerance and impatience is assessed in many students. One of the limitations of our study was that there was no assessment of childhood abuse, which can be helpful to define a very valid cause of depression or guilt in young students <sup>27</sup>. Hypochondriasis was assessed in many students during our study. Hypochondriasis and nosophobia are reported features in medical students  $^{28}$  and is referred to as a "medical student disease"  $^{29}$ . Medical students face many dire circumstances, difficult patients and deal with traumatic and injured patients or cases on regular basis. They frequently encounter diseases and



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Figure 1 Frequency and severity of symptoms

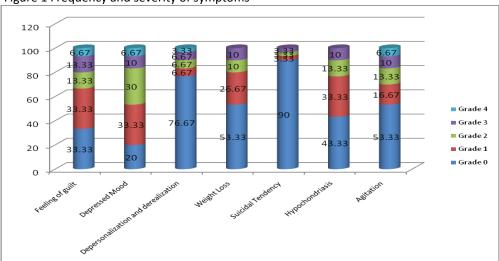


Table 2 Definitions and grading criteria of symptoms (adapted

from HAMD)33

Symptoms/Score	0	1	2	3	4
Depressed Mood	Absence of symptoms	Depressed feeling indicated only on questioning	Depressed state spontaneously reported verbally	Communicates depression non- verbally i.e., through facial expression, posture, voice and tendency to weep	Patient reports Virtually, only depressed mood in his spontaneous verbal and non- verbal communication
Feeling of Guilt	Absence of symptoms	Self reproach, feels he has let people down	Ideas of guilt or rumination over past errors or sinful deeds	Present illness is a punishment, Delusions of guilt	Hears accusatory or denunciatory voices and/or experiences threatening visual hallucinations
Suicidal Tendency	Absence of symptoms	Feels life is not worth living	Wishes he were dead or any thoughts of possible death to self	Suicidal ideas or gesture	Attempts at suicide (any serious attempt rates 4)
Agitation	Absence of symptoms	fidgetiness	Playing with hand, hair, etc.	Moving about, can't sit still	Hand wringing, nail biting, hair-pulling, biting of lips
Hypochondriasis	Absence of symptoms	Self- absorption (bodily)	Preoccupation with health	Frequent complaints, request for help, etc.	Hypochondriacal delusions
Loss of weight (when rating by history)	Absence of symptoms	Probably weight loss associated with present illness	Definite (according to patient) weight loss	NA	NA
Depersonalization and Derealization (such as: feelings of unreality; Nihilistic ideas)	Absence of symptoms	Mild	Moderate	Severe	incapacitating

deaths and realize the lack of therapeutic omnipotence <sup>29</sup>. The young mind of a medical student is engaged in many ways. The key to professionalism to be adapted by these youngsters is to 'engage the mind but not the heart'<sup>30</sup>. In conclusion it is very important for the future doctors to cope with the stressors

and readily acquire therapy or consultancy on persistence of psychogenic symptoms. The city conditions are contributing towards the worsening of symptoms. The need to generate awareness regarding depression and anxiety is still there. The



medical students need a relaxed and healthy mind-set in order to shape into professionals who are proficient, knowledgeable and possess good precision and judgment <sup>31,32</sup>. Depression and psychological conditions should not be treated as trivial problems or labelled a stigma. Acceptance towards a problem and seeking appropriate solutions in the society where healthcare facilities are scarce and costly, is a huge challenge. This is a time to sit back and realize the intensity of the present scenario as well as the future and build action.

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#### **AUTHORS' CONTRIBUTIONS**

Authors contributed equally to all aspects of the study.

# PEER REVIEW

Not commissioned; externally peer reviewed.

## **CONFLICTS OF INTEREST**

The authors declare that they have no competing interests.